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ORIGINAL ARTICLES.

ADVERTISING IN THE PROFESSION.[1]

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THE subject of advertising in the profession is entirely too broad for consideration in a single paper. It is one of the most vital questions pertaining to latter-day medical practice. We may enact the rôle of the ostrich with his head in the sand as much as we please, but the advertising problem is one from which we cannot escape. Perhaps if we follow the example of the ostrich, the problem might not stare us in the face, but, to use an Irish bull, it would still confront us. Time was when the question of professional advertising was simplicity itself. Those of us who graduated twenty or more years ago will recall that the commandment, "Thou shalt not advertise," covered the ground without any apparent necessity of hair-splitting niceties of distinction. On entering practice, however, we found things differing from our ideal. We found that that ideal was more often honored in the breach than in the observance. We found that we had taken the medical eleventh commandment too literally. Its correct interpretation should have been, "Thou shalt not be caught advertising, nor shalt thou pay for it openly." We very quickly discovered that living without advertisement in the practice of medicine was all moonshine, that we were compelled to advertise in one way or another or starve. The exigencies of the situation have from year to year increased the necessity of advertisement, have lessened opportunities for surreptitious advertisement, and compelled the adoption of methods on the part of some of our brethren whose motto, "Get there, Eli," would cause a Chatham Street Jew to blush.

Our medical forefathers gazed complacently upon the code of ethics as containing all that was good and pure and holy in the medical faith.

All the evidence goes to show that times have vastly changed since the code was written, and that the profession is surreptitiously trying to adapt itself to that change. In this endeavor it is perhaps by no means surprising that certain members of the profession have gone to the last extreme and adopted methods which put out-and-out advertising to the blush. The struggle for readjustment of our ethical notions will continue until out of the chaos of dishonest commercialism and shady methods comes a practical system of medical ethics that shall contain fewer inconsistencies and fewer absurdities than the code by which we have professed to be regulated for many years. It is a singular fact that the latter-day physician and surgeon has shown a tendency to adopt lines of conduct removed to the farthest extreme from the code. When backsliding began it seems to have progressed with a vengeance. Pecksniffs a plenty there may have been among past supporters of the ethical interpretation of the code, but nowadays the Machiavellis outnumber the Pecksniffs.

It is my belief that "Thou shalt not advertise," was of necessity written in a Pharisaical spirit, and that it has been the cloak of more inconsistency and hypocrisy than anything ever written for the guidance of medical men. Whatever the conditions may have been at the time the code was written—and I do not believe they differed in kind from those prevailing at the present day—conditions nowadays absolutely demand advertising of one kind or another on the part of medical men. The physician may gloss this necessity over, and he may deceive himself into the belief that he is not given to advertising, but the fact still remains that he must advertise or starve. All roads lead to Rome, and it is by no means necessary that the physician should advertise in the newspapers or by handbills, in order to accomplish his ends; nor does it follow that he is unjustified or unworthy of respect because under the stress of his environment he advertises in one way or another. If the opinions of those who champion the cause of the commission-giving and commission-taking doctor should be accepted by the profession, it would no longer be possible to classify advertising on the part of physicians. There is nothing lower in the scale in advertising than the commission business. Give the medical man the privilege of sending out paid agents, or employing professional drummers on commission, and he will have nothing more to conquer in the world of advertising. Commission practice, in point of effectiveness, bears the same relation to ordinary advertising that accurate rifle-shooting does to inexpert shotgun practice. With the professional drumming sleuth on the trail of an operation case, it is hardly possible that it could escape. I believe, however, that the reputable members of the profession discountenance such methods as those involved in commission-paying, commission-receiving, and medical and surgical drumming.

The most important forms of professional advertising are college advertising, medical writing, social advertising, church advertising, secret society advertising, and that indefinable something

[1] Read before the Physicians' Club of Chicago, January 28, 1901.

known as newspaper prominence, which is called advertising by the fellow who can't get it, and is considered a laudable enterprise by the fellow who does—the old story of the pigs in the clover patch. As is true of all other affairs in human life, it is a noteworthy fact that it is the pigs outside the fence that do most of the squealing.

It would require a book to do justice to the various phases of advertising; besides, we are all treading on thin ice, and if the subject were threshed out too thoroughly some of us might slump through.

College and hospital advertising affect us most. The necessity of obeying the spirit while violating the letter of the code upon advertising, has been the chief factor in the multiplication of medical colleges. I am well aware that most teachers pose as philanthropists. They would not advertise for the world—that is, unless they thought they could get the world. But I have no hesitancy in saying that self-advertisement is the foundation stone upon which the average college teacher builds his hopes. I do not say that this is true of all—for some are salaried—but I have mighty little respect for the fellow who claims that he is teaching for the love of humanity, believing as I do that Charles Lamb, or whoever it may have been, was correct when he said, "Humanity is I, writ large." Colleges have multiplied to such an extent that one of the best advertisements a man can have in the profession nowadays is that he is not a professor. If colleges keep on multiplying, as they have during the last few years, our medical teachers will be "professors" indeed. There will not be enough students to go round, and our teachers will have nothing to do but—"profess."

I have no doubt that in former days the advertisement incidental to college teaching was more or less profitable to the incumbent of a Chair, and I suppose every man, who has been teaching for a number of years, thinks that it is still profitable. It is not really profitable, however, because very few men who occupy college positions are gleaning greater financial rewards from their practice than they would now be doing had they never connected themselves with a medical school.

The time is approaching when the medical profession will be compelled by its own necessities to limit the number of medical colleges and the number of medical students. The medical teacher is engaged in two evils: (1) Educating competition to himself and others. (2) Inducing young men to enter an already overcrowded profession. Ere long the medical man will become inspired by a spirit of professional altruism and will do his utmost to prevent young men entering the profession of medicine. The output of medical graduates must be checked, else the profession will be reduced to the same pitiful plane that it occupies in certain European countries. So keen has competition become that teachers in certain colleges are now cutting each other's throats, so to speak, in order to obtain, shall I say practice, or business? I will illustrate by citing a hypothetic case.

A hypothetic medical school in a presumptive great metropolis has in its faculty, we will say, a round half-dozen (mind you, I do not say a square half-dozen) surgical teachers. Some of these teachers are content to let their work speak for itself, and to appeal to the Alumni of the institution only through their ability as teachers and operators. A certain proportion, however, of the aforesaid coterie of surgical teachers bids for the patronage of the Alumni of the institution by offering a commission of fifty per cent. on all surgical cases referred to them.

It would be interesting to know in what way the work of a surgical teacher who does not prostitute his position can become profitable to him with such degrading competition so near him. It would also be interesting to know of what value surgical instruction is to the graduates of such a school after they have learned from some of their eminent teachers that it is more profitable to send cases to the latter at fifty per cent. commission than it is to operate themselves. I submit this illustration to the thoughtful consideration of the profession.

The young man who starts out in practice with the intention of doing surgery commands at first relatively small fees. He may be perfectly willing to give a percentage of his fees for such operations as are brought to him; but the practitioner who has a case to "steer" says to himself: "If I take this case to young Dr. A., he probably will not be able to get more than $200.00 out of it, which will leave only $100.00 for me. If I take it to Professor B., he can get $1,000.00 out of it, which will give me $500.00." Under such circumstances, it is hardly to be supposed that the general practitioner would be like the far-famed jackass between the two bundles of hay. Can it be possible that our young medical men cannot see that such methods will eventually absolutely demoralize the profession, to say nothing of the dishonesty and degradation of such practices and the creation of a surgical trust? Many pages might be written on the subject of college advertising, but it would be difficult for me to present in a more striking manner the trend of medical college advertising at the present day.

There is, however, one point in connection with medical college positions that I wish to touch upon. It is a noteworthy fact that among European teachers it is customary to print college titles upon their professional cards and stationery. I do not suppose that they are any less ethical than we, but I submit the proposition that this method of advertising is not one whit worse than the appearance of the titles of teachers in college announcements. I believe the time has passed when it is reprehensible for the physician in

general, and the teacher in particular, to lay his wares before the possible consumer. There has been too much hiding of the professional light under the bushel of hypocrisy and surreptitious methods of advertising.

In this connection the dispensary and free clinic route to fame deserves consideration. The profession has long been suffering from moral strabismus, superinduced by gazing too fondly at the large round American dollar, which looks so near, yet is so far away. A number of men may incorporate a hospital or dispensary clinic and all is ethically well. One man, or even several men, may not organize a private concern of the same kind for advertising purposes without losing caste. It would be well for the profession at large to conduct its own free clinics. Let every man who so desires designate hours for the poor on his cards. This will do much toward killing deadbeatism, and regulating hospital and dispensary evils. Let there be one law for all!

Apropos of college and hospital positions and professional cards, I remember with some amusement an early experience of my own. I managed to muster sufficient courage to have printed upon my first professional card many years ago, "Late Resident Surgeon New York Charity Hospital." A distinguished medical gentleman in this city, after conference with an equally distinguished confrère, visited me and assured me that I was a nice young man gone wrong. I promised not to do it any more, and I fully intended to keep that promise, but a day or two thereafter I saw an item in a newspaper to the effect that my two distinguished friends had just performed "a formidable and successful operation for the removal of a sebaceous cyst, fully as large as a hen's egg," from the cranium of one of our prominent West Side citizens. I then made up my mind that the wen was mightier than the card. I did not destroy my cards.

Hospital advertising might be termed a subdivision of college advertising. What I have already said regarding the payment of commissions to college men applies equally well to hospital men, and perhaps with greater force, especially my remarks on the surgical trust.

The extreme to which college advertising, or rather, in this instance, conjoined college and hospital advertising, has been carried in certain quarters is very suggestive. It has been rather edifying to read in one of our prominent evening papers the advertisement of a certain post-graduate school in Chicago. This post-graduate school announces to all and sundry that it is prepared, not alone to teach medicine, but to teach practitioners of medicine. The names of five of the faculty are affixed thereunto. No newspaper advertiser could ask for a better thing than this. It would be interesting to know what proportion of the professional clientèle of this post-graduate school is accessible viâ the daily press. Can it be possible that the school caters only to the patronage of physicians who read no medical literature, but rely exclusively upon the advertising columns of the daily press for their intellectual pabulum? It would also be interesting to know whether the other members of the faculty were mulcted for the aforesaid advertisement. If they were, they would be justified in open rebellion.

Speaking of the value of college positions as a means of advertisement, a somewhat recent experience of my own shows that they are used by different men with varying degrees of effectiveness. It is not even necessary to have a position of one's own in order to use the college as a means of advertisement. I relate the following incident because it is really funny.

It so happened that some months since, by reason of multifarious complaints, real and imaginary, I was unable to fulfil my college duties. Without any inquiry being made as to whether the party selected would be acceptable to me, a certain individual was appointed my substitute. He immediately proceeded to prepare a course of lectures in accordance with his own notions, and without deigning to consult me as to what portion of the course remained to be covered or other little details that a man of average intelligence should have known were necessary in the premises. I meanwhile requested another gentleman to fill my hours for the remainder of the term. Substitute No. 1, upon the assurance of somebody or other that I had both feet in the grave, published his picture and life history in all the newspapers in Chicago, along with the wonderful surgical inventions with which he had blessed a benighted surgical profession and the announcement of his appointment to my Chair. He submitted a paper to the Editor of the *Journal of the American Medical Association* for publication, to which he appended the titles pertaining to my Chair. Fortunately, the paper was returned as ineligible. The medical journals, quoting from the Chicago daily papers, announced the change of professors in the college, and as I was never known to resign anything, my professional friends throughout the country labored for some time under the delusion that I was dead. Which reminds me of a rumor which once spread abroad to the effect that Mark Twain was dead in London. On hearing of it, Mark promptly sent a cablegram to this country, reading: "The rumors regarding the state of my health have been greatly exaggerated."

The extent to which the specialist may advertise his specialty has long disturbed the already over-burdened conscience of the profession.

It will be remembered that, once upon a time, when the Fool-Killer was away on a vacation, the members of a learned National

Society wrestled long with the question of Ophthalmologist and Otologist vs. Oculist and Aurist. It was finally decided that a man who printed on his cards, "Oculist and Aurist," was a goat and the sheep would have none of him. If he expressed it, "Practice Limited to Diseases of the Eye and Ear," he was a milk-white lamb with wool a yard long. I wonder how many of those latter-day saints are drumming for "business!" The profession has kept on swallowing its cud, until now one may put on his professional cards, "Diseases of Women Only." But if he print, "Diseases of Men Only," he will be brought to book for his ignorance of the comparative esthetics of leucorrhea and suppressio mensium, and spermatorrhea and varicocele.

I presume that the term social advertising is somewhat offensive to members of the profession who believe that their success in life depends upon their own intrinsic greatness. But if we are honest with ourselves, we must admit that this form of publicity and promotion is one of the most important factors in securing practice. Some are very much more expert in self-advancement in this direction than others. The man who has had a talkative wife for his advertising agent is perhaps the most brilliant success in this line, providing she talks only of his greatness and is impersonal in her discussion of his clientèle. When the endurance and mechanical excellence of a talking machine are combined with the qualities of a female diplomat in the doctor's wife, it is difficult to see how he could possibly make a failure in life. In these piping days of competition I would advise the young doctor who is ambitions for speedy success and popularity, first, to marry rich; second, if he cannot marry rich, to marry a female talking machine. One of these ladies with a few pink teas and yellow breakfasts can give her young doctor husband more of an impetus on the road to fame and success than many barrels of midnight oil. He who bloweth not his own horn, the same is sometimes blown by his wife.

Church advertising and secret society advertising are very much of the same kidney. There is merely a difference in politics. Of course, the church-going doctor, especially the man who belongs to several churches or rents pews therein, will repudiate the insinuation that he has an object in view, but that time-worn "gag" fools nobody, not even himself. Personally, in the days of my youth, I liked the secret society dodge better, perhaps because I was more familiar with it. But I wish to say right here and now that, unlike some of my more modest brethren, I never flattered myself with the unction that I was staying up nights for my health. I will frankly confess, that my ideas of the value of that sort of advertising were rather exaggerated because, I fancy, the competition was so keen.

Is there any tinge of selfishness in the aims of medical writers? I presume there are men in the profession who are possessed of sufficient egotism to believe that they are conferring a distinct benefit on humanity by all their scientific writings, and who, with this idea in mind, lose sight of the possible value of their literary work to themselves. I believe, however, that aside from the limited few of these ego-maniacs, the average medical writer, if you can involve him in a heart to heart talk, will confess that he has written primarily for No. 1. Most medical writers would devote their attention to something more profitable than literature if they felt that their efforts resulted only in self-improvement and good to humanity at large. The man who writes articles and publishes reprints is engaged in advertising. He is, however, advertising to his competitors, which is the longest possible road to the consumer and therefore tolerated by the profession. There are those in our profession, however, who are very impatient with the medical writer because of the implied attempt to advertise himself. This position is absurd. The value of literature to the reader is by no means determined by the object which the writer has in view. The man who writes to advertise himself is quite likely to give the reader his best effort, for in this field, as in every other, competition is keen. The man who throws a reprint into his waste-basket simply because he thinks the author is using his reprints as a means of advertisement makes himself ridiculous. The author in the field of general literature often gets his reward—why then should not the medical writer? The medical writer must needs content himself with the advertisement of his work. The "all hog" publisher will not recompense him. Just think of writing a text-book for a beggarly five per cent. royalty, or, as my publisher puts it, five per cent. royalty after the publisher has recouped himself, alterations and amendations to be charged up to the author. If some of us got as little fame out of our work as we do money out of our publishers, I fear the literary mill would not grind so assiduously.

The question of newspaper notoriety has caused more secret misgivings and bitterness of spirit in the medical profession than almost anything that could be mentioned. The young man who has not yet attained sufficient prominence to enable him to secure newspaper notoriety, and the old man who has been a professional vegetable all his life, alike bitterly resent any representation of their more fortunate professional brethren in the newspapers. In a general way, it may be said that only advertising quacks and the big men of the

profession are the ones to whom the columns of the newspapers are open.

The unwritten law of the medical profession, that its members should keep themselves in the background, has been the greatest stumbling-block to professional advancement. The medical profession to-day has no particular social, commercial, financial, or political importance. Why? Simply because of the bigotry and intolerance of the profession itself. I hold that every physician or surgeon who becomes important in the public eye, either socially, politically, or in commercial enterprises, is a powerful factor in the advancement of the best interests of the profession. The profession is poor; the profession has no particular "pull" in either commercial or political lines, and yet we wonder why it is impossible to get legislation against quackery and various form of medical faddism. As a matter of fact, the doctor, as such, is a nonentity in the community. The medical man who makes a political speech, or becomes identified with a successful commercial venture, or is spoken of frequently and in a complimentary way by the newspapers, immediately becomes a target for the abuse and invective of the profession at large. This condition of affairs must change. I hold that it is the duty of every man in the profession not only to himself, but to the profession, to bring himself before the public, as a citizen and a representative of the profession, where it can be done respectably, at every possible opportunity. The doctor should take interest in politics. He should be a man of affairs. If he accumulates wealth, the profession should not consider it a high crime and misdemeanor, but a distinct advantage to the profession at large. By proceeding along these lines the time will come when we, as a profession, can command legislation, instead of being compelled to beg it like a lot of mendicants as we are at the present time. The quack has votes; the quack has money; the quack has pull and newspaper influence, and we have nothing; not even the gratitude of the people to whose welfare we devote the best years of our lives.

In speaking in favor of newspaper representation of medical men, I do not mean that they should publish their operations or premature accounts of alleged wonderful discoveries in the papers. The example set by certain Eastern surgeons, men of the highest prominence, in inviting reporters or permitting reporters to be at their operative clinics, cannot be too strongly condemned. I believe, however, that signed articles of a quasi-scientific character by medical men, from which the public can derive intelligent information on scientific subjects—and particularly matters medical—first hand, should be considered ethical by the profession. There is only one way to down quackery, and that is by educating the people to an intelligent understanding of what we are and what we are doing. The public is bound to make comparisons, and if it has any data upon which to base such comparisons, the quack will have much less advantage in the competition than he now possesses. We expect too much of the public. We expect it to draw hard and fast lines between quackery and legitimate medicine, while the quack is stating his case and the medical man is retiring behind the bulwark of his professional ethics and dignity.

As for new discoveries, it is high time that the frantic rush into print of the original investigators, so-called, who has discovered a lot of things that "ain't so," should be stopped. A newspaper account of a wonderful discovery was recently published, which was based upon experimentation with a borrowed apparatus on a single dog, the day before.

Careful, conscientious work and good results, bringing as they do in their train the good will and approbation of the laity, constitute the best advertisement that the physican can have. We all know this, but "first catch your hare." In order to do good work, and get good results, we must have patients, and it is the attributes that the public thinks we possess rather than those which we do possess which bring us our patients. The layman comes to each of us because he thinks we are as good or better than our neighbors in the profession. Those of us who are conscientious know how often the layman deceives himself. Be that as it may, however, the profession must first catch its hare by some sort of advertising, else its prospects of a dinner will be slim indeed.

RESECTION OF THE CERVICAL SYMPATHETIC.*

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FOR the clinical history of the following case, the privilege of operating, and much valuable assistance during the operation, I am indebted to my friend, Dr. J. H. Shorter, Ophthalmologist to the Macon Hospital.

T. P. W., white male, aged eighteen years, received a perforating lacerated wound of the cornea and iris of the right eye in 1887. Sympathetic trouble began in the left eye in September, 1894. For this latter condition he received antiphlogistic treatment to the left eye, and enucleation of the right globe. In June 1897, vision—$^{20}/_{100}+$. One year later cataract had developed, further impairing vision, while the tension of the globe had increased to +2. Iridectomy was then performed with partial success in reducing the tension. Later tension again increased. At the time he was referred to me for operation, July 5, 1900, he was suf-

* Written for the Southern Surgical and Gynecological Association, Atlanta, Ga., Nov. 13, 1900.

fering from secondary glaucoma dependent upon sympathetic iridocyclitis plastica: vision was reduced to light perception and there was continued increase of intra-ocular tension, + 2. There was circumcorneal injection and more or less pain in and around the left eye.

On July 7th he was anesthetized by Dr. Derry, and, assisted by Dr. Shorter and Dr. Carswell, I performed Jonnesco's operation, resection of the superior cervical sympathetic ganglion. An incision, about three inches long along the posterior border of the left sternocleidomastoid was made from the mastoid process to about the middle of the neck, just missing the external jugular vein. Behind the sternocleidomastoid the tissues were separated, exposing the trapezius muscle; the sheath of the carotid containing the artery, the internal jugular vein, and the pneumogastic nerve was found. Back of the latter and separated from it by the thin carotid sheath the ganglion was located lying on the major rectus-capitis muscle. So close together were the two nerves, and so nearly of the same size and appearance, that there was some hesitancy in deciding between them. By alternately pinching them and watching the effect on the rapidity of the pulse, the pneumogastic was recognized and dropped. Stripping the sympathetic ganglion and cutting away its branches, its lower end was severed from its continuation below, then with curved scissors the upper end of the ganglion was cut just as it emerges from cranium. The wound was then closed and properly dressed.

Within a few minutes the conjunctiva was greatly congested, the eyes suffused with tears, slight left lateral sweating, with redness of the side face and ear, began, and there was some flow of nasal mucus. The next day the patient had reacted well, pain in and around the eye was relieved, there was ptosis of the left eyelid, but owing to fixation of the iris to the capsule of the lens, no change of the pupil was observed. In addition to the above symptoms, there was complete anesthesia of the left ear and marked huskiness of the voice. The conjunctival injection, the lacrimation and nasal discharge gradually disappeared.

July 16th, when he was discharged from the hospital, intra-ocular tension had reduced from + 2 to normal, pain was entirely relieved and the patient claimed improvement in vision. Ptosis had slightly increased, and the globe had receded to some extent. The voice continued husky, due, it was found by the laryngoscope, to paralysis of the left vocal cord, while anesthesia of the lobe of the ear was still present.

October 26th, Dr. Shorter reports that tension remains normal and that the field of vision is widened, but that he can find no improvement in acuteness of vision. The patient, however, stoutly maintains that he does see better and is urgently awaiting a promised operation for removal of the cataract by Dr. Shorter. He has had no pain since the operation. Ptosis is still present, though improving; the anesthesia of the ear and paralysis of the vocal cord is almost entirely relieved.

It must be understood that the two last symptoms are not dependent upon the sympathectomy, but were the results of unintentional wounds of special nerves, occurring in the course of the operation, and are not necessarily present in every operation.

Before beginning the discussion of my subject, I wish to distinctly state that this operation was not undertaken with any hope of improving the sight of this patient, but it was performed solely to relieve the pain in the eye and reduce the tension of the globe, thereby saving what vision there was from the destructive effect of a gradually increasing glaucoma. If there has been any improvement, it is more than we expected, for the opacity of the lens and its capsule is the main barrier to vision in this patient.

Division of the sympathetic nerve in the neck is an old experimental operation employed by physiologists to demonstrate the action of the sympathetic nervous system on the vegetative life of animals, its control over the vaso-constrictors in organs and tissues and its influence on the involuntary muscular system. Claude Bernard in 1851 first demonstrated that vascular congestion and increased secretion followed section of the sympathetic nerve. Jonathan Hutchinson, in 1866, recognized the ocular symptoms attendant upon paralysis of the superior sympathetic ganglion. Jonnesco and Floresco,[1] applying the technic of experimental research to patients about to have resection of the cervical sympathetic performed, have demonstrated the identity of the functions of this nerve in man and animals.

Irritation or stimulation of the superior cervical ganglion causes pallor of the head, dilation of the pupils, and prominence of the eyeballs; irritation of the inferior ganglion accelerates cardiac action; while stimulation of the middle is supposed to hasten the thyroid circulation; less is, however, known of the thyroid sympathetic control. Section of the superior nerve causes congestion of the head, lowered tension in the eye, paralysis of the dilators of the pupils and of the smooth fibers of the upper eyelid; retarded pulse follows section of the lower ganglia. Unilateral warmth, flushing, sweating, lacrimation, increased nasal secretion and saliva are the transitory symptoms of unilateral section of the first ganglion; the permanent symptoms, regardless of disease, are narrowing of the pupil, ptosis and retraction of the bulb.[2]

Reasoning from its physiological effects for its therapeutic results, sympathectomy has been undertaken for the relief of glaucoma, exophthalmic goiter and epilepsy. Recently it has been performed in vertigo of cerebral

anemia (once), and essential migraine (once) by Jonnesco, in facial neuralgia (three times) and spasmodic torticollis (twice), once by Chipault[3] and once by Kalmus[4] all reporting successful results. As a surgical procedure, it dates its birth practically from 1895, and its value is still in doubt, awaiting for its answer the test of time.

Abadie, basing his deductions on the theory that glaucoma is dependent on vaso-constriction, was the first to advise resection of the supreme ganglion in order to overcome the tension of the circulation in the eye in this disease. Dilatation of the arteries resulting from the operation, the blood-pressure is thereby lowered and extravasation is diminished; the pupil becoming contracted, the iris angle and the secretory canals are relieved of pressure, giving the aqueous humor a ready means of escape; and, further, the peribulbar muscles are relaxed, thus relieving the venous circulation. More blood circulates through the eye and the orbital region, nutrition is improved, and waste products are more readily removed.[5]

In addition to the symptoms always present on section of the sympathetic, there is in glaucoma immediate relief of pain; intraocular tension falls in a few days to normal or below, and improvement of vision begins. In some cases tension is relieved at once. Zimmerman noted in one case a fall from 2½ to much below the normal just after the operation; Dr. J. M. Ball of St. Louis[6] in one case saw it fall from + 2 to + 1 in twenty-four hours, and in a second case from + 3 to +1 in a short time. In my case, how soon the tension fell I cannot say, as Dr. Shorter could not make an examination until the tenth day; it had then fallen from 2 to normal. In cases where vision is not entirely lost, improvement is gradual. Mohr reports improvement from $^{5}/_{15}$ to $^{5}/_{9}$, with an extension of the field of vision from 5 to 10 degrees; Abadie saw vision increase after several months from $^{1}/_{10}$ to ⅓ on the left and ½ to ⅔ on the right.[7]

In Europe the operation has been performed in glaucoma more than thirty times by Abadie, Jonnesco, Chipault, Zimmerman, Demercheri, Mohr, and others, with almost unvarying success, and it has become one of the established operations abroad. Cases are reported of relief lasting up to the third and fourth years after operation. In America the operation has not become so popular. J. M. Ball in a personal letter states that he can learn of only three other surgeons on this side who have performed sympathectomy for glaucoma, G. F. Suker, of Toledo, D. H. Coover, of Denver, and A. R. Kiefer, of St. Louis. Each of these has done one successful operation. Dr. Ball has himself operated five times, four times for glaucoma and once in atrophy of the optic nerve. Since his paper was read at the International Ophthalmological Congress at Utrecht, and published in the *Journal of the American Medical Association* last June, he writes he has operated once for hemorrhagic glaucoma in a young man aged twenty-five years, left eye completely blind, tension + 2, pupil widely dilated, the ophthalmoscope showing numerous hemorrhages and cupped disc, heavy continuous pain in and around the diseased eye. He had been advised to have enucleation performed for relief of the pain. Dr. Ball performed resection; one year later the eye is quiet, entirely free from pain, and tension is normal. Had sympathectomy been performed before vision was lost, he believes that the sight would have been improved. Abadie, he states, reports a similar case operated on in the earlier stages with good visual results. From his study of glaucoma, Dr. Ball is led to believe that the disease is an effect of pathological changes in the sympathetic nervous system, resulting in microscopical changes in the nerve tissue of the superior cervical ganglion. He has kindly loaned me some drawings of sections of a normal ganglion and of excised ganglia removed for glaucoma, illustrating these pathological changes in the ganglia fully justifying the facts of his claim. As these drawings are to appear in his book on ophthalmology, I have taken the liberty of having copies made and present them in this connection. Prof. Ball has the honor of being the first American operator to perform sympathectomy, and also of being the first to operate in atrophy of the optic nerve.

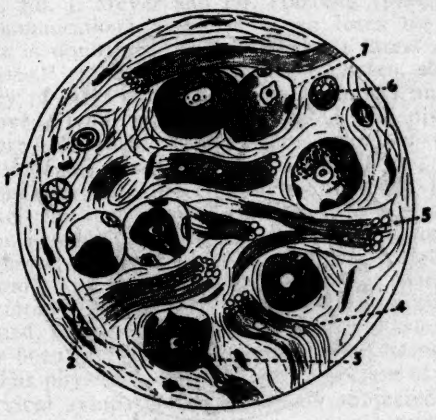

Fig. 1.

Microscopical appearance of a normal sympathetic ganglion. (Kindness of Dr. Ball.)

Sympathectomy is indicated in glaucoma simplex, inflammatory glaucoma where iridectomy has failed, hemorrhagic glaucoma early in the disease; and it should be tried in absolute glaucoma with pain, in preference to enucleation. In unilateral trouble the ganglion of the corresponding side should be excised. While sympathectomy may not be curative in

every case of glaucoma, the results thus far have been sufficiently satisfactory to make it a desirable procedure in this much dreaded disease.

Bilateral removal of the three cervical ganglia in exophthalmic goiter is followed by relief of precordial pain, decrease of the pulse-rate and retraction of the balls of the eyes, but as far as I can learn, there is little or no early diminution of the goiter following the operation. Little is definitely known of the physiological action of the middle ganglion; its branches to the thyroid gland are supposed, however, to control its secretory activity and its nutrition. If this is true, resection of the ganglion should produce some demonstrable action upon the thyroid circulation, change its size, or paralyze its secretions; simple section fails to show any results whatever, while removal of both the superior and middle ganglia

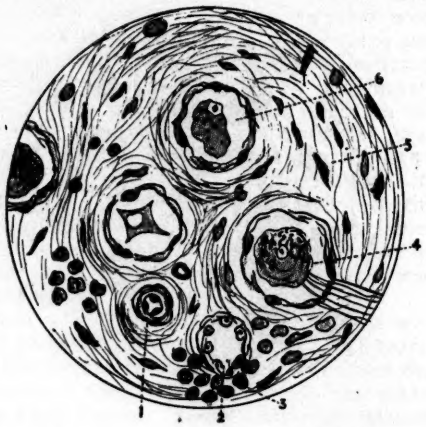

FIG. 2.

Microscopical appearance of a sympathetic ganglion removed for glaucoma. (Kindness of Dr. Ball.)
1, artery; 2, vein; 3, area of small round-cell infiltration; 4, round nerve cell; 5, connective tissue; 6, atrophied nerve cell.

alone has been abandoned as useless and incomplete in disease. Wertheimer believes that certain fibers of the sympathetic chain in the neck do control the secretory functions of the thyroid. This is doubtful, since it is stated by some operators that resection has no effect on the colloid matter secreted in the gland, as the goiter does not usually decrease in size. Combermale and Gaudier,[8] agreeing with Wertheimer, believe that after section of the main trunk the thyroid fibers cease to preside over the thyroid secretion; this secretion in the disease under consideration, being a toxin, causes the tachycardia. The drop in the pulse-rate, which is delayed, they think is due to the stoppage of the toxin secreted, for if it was due to the simple section of the nerve supply to the heart, retarded action should come on immediately. Dr. Inglis[9] entertains the theory that the group of symptoms found in exophthalmic goiter is due to the entrance into the blood of altered thyroid secretion. The normal secretion, he says, is an enzyme, affecting the tissue growth; in this disease the secretion is a poison having elective action on the nervous system, particularly the sympathetic. Possibly Dr. Inglis has mistaken the result of sympathetic nerve change for its cause. In this connection, I would suggest that possibly Dr. Ball's experience in finding microscopical changes in the superior ganglion in glaucoma cases may be true also of all the ganglia in Graves' disease; if so, these nerve changes may so affect the functional action of the thyroid that toxin secretion would be excited. Further, it is claimed that sympathectomy meets with its best results in primary exophthalmic goiter; those cases in which the tachycardia precedes the enlargement of the gland, and in which thyroidectomy is most fatal. If Dr. Ball's theory of the possible dependence of glaucoma on disease of the sympathetic system, in which microscopical nerve changes appear, is true, is it not possible that the good results of the operation in primary Graves' disease are alike dependent upon the removal of a diseased chain of ganglia which affect the eyes, the thyroid and the heart through a toxin secretion of the thyroid gland? In secondary exophthalmic goiter the operation is less favorable; here the rapid pulse and exophthalmos come on after the goiter and are dependent upon its pressure on the vagus (Jonnesco). Thyroidectomy in this condition gives better results.

Jaboulay deserves the credit of introducing sympathectomy for Graves' disease, as he first advised the operation, and on September 2, 1895, made the first deliberate section of the cervical sympathetic. Combermale and Gaudier report a case in which there was early diminution of the exophthalmos, immediate disappearance of precordial pain and a reduction of the pulse from 200 to 100 during the first week, but no modification of the goiter itself. Jonnesco reports immediate disappearance of the exophthalmos, relief of nervous symptoms referable to the heart, diminution of the trembling, tachycardia, carotid pulsation and thyroid thrill when present, and in one case a fall in the pulse from 140 to 70 and 80. In fifteen cases he has had 60 per cent. cured and 40 per cent. improved; one case he reports of unilateral operation with improvement of the corresponding side. Chipault reports six cases cured. Other European operators have had equally good results.

In America I can find only one surgeon who has performed sympathectomy in exophthalmic goiter. Learning from Dr. Hartwig (personal communication) that Dr. B. Farquhar Curtis, of New York, had once operated, I wrote to Dr. Curtis, and with his kind permission, I present the notes of his case, which has never been formally published:

"Woman, Irish, twenty-nine years old, residence New York City, married; for two years she had had symptoms of exophthalmic goiter; admitted to Dr. Curtis' service, Bellevue Hospital, May 12, 1899. Moderate exophthalmos; considerable nervousness. Thyroid gland much enlarged, estimated size of hen's-egg on each side. Paralysis of right vocal cord. Pulse not very rapid—106 the highest. Medical treatment tried and failed during two years.

"Operation May 17, 1899. Ether anesthesia. Cervical sympathetic removed (1st and 2d ganglia and cord down to the 3d), bilateral section. Wound sutured. Primary union. No effect on pupils. Gradual improvement in nervousness and exophthalmos. Thyroid reduced in size. Paralysis vocal cord cured. Ten months later, she was presented to the Neurological Society; the improvement had continued in all symptoms except the pulse. *This was more rapid and a cardiac murmur could be heard.*" (Italics are mine.)

Dr. Curtis closes his letter with the remark that the cardiac complications in the case may be of independent origin, but that the case is one which can be classed as a decided improvement, in which I fully agree. He further says that this is the only case in which sympathectomy for exophthalmic goiter has been performed, that he knows of, in the United States. The results in Dr. Curtis' case are certainly sufficiently gratifying to encourage other American operators to follow his lead in this distressing disease. The results of resection of the sympathetic for this disease have been universally favorable, and thus far the operation has been without danger. Such being the case, total bilateral resection, although a delicate operation, is certainly superior to thyroidectomy, which is extremely hazardous, and it should be undertaken in all primary exophthalmic-goiter cases in which medical treatment has failed.

Jonnesco, basing his perseverant advocacy of the operation in epilepsy on the idea that the disease is due to a cerebral anemia, believes that complete bilateral resection of the cervical sympathetic so alters the cerebrospinal circulation that hyperemia takes the place of ischemia. Increased nutrition to the nerve-cells is thereby supplied and the toxic products of disease are rapidly eliminated. Beginning in 1896 he has up to August of the present year made 126 resections; 97 of these operations have been undertaken for epilepsy. To him, certainly, belongs the honor of doing the first complete bilateral sympathectomy, and also the credit of persistently developing its various indications. He was not, however, the originator of the operation, not even for epilepsy. Alexander of Edinburgh is credited with having performed resection of the cervical sympathetic as early as 1889; Jacksh, Baracz and Bojdanick operated in 1892 and 1893; while Jaboulay advised the operation in epilepsy in 1895. The rationale of the cure of epilepsy by sympathectomy is much less substantial than is the theory of the relief of glaucoma and exophthalmic goiter by the same procedure, while the results are far less encouraging. Jaboulay and Lanois,[10] in a study of the subject, expressed themselves as doubtful of the advisability of the treatment, having noticed that in those cases which were improved, and more especially in those cases which were cured, there was a strong hysterical element in the histories. Le Borde advises that it should be abandoned as a remedy for epilepsy. Chipault reports in August, 1900, three cases cured and twenty uncertain in results. Schober, on the contrary, in 1899, showed that not a single case had been cured in all of the operations in Paris. Carl Beck, after reporting three cases[11] comes to the conclusion that the operation has no value in epilepsy. In one other American operation, by Dr. Ed. J. Meyer and Dr. Hartwig (personal communication), as far as I can learn the result is doubtful. Even Jonnesco's latest statistics,[12] embracing his entire 97 cases, show only 12 cases cured, 7 improved, and 11 unimproved; while 45 cases, he stated, had disappeared or their results were unknown (?). Five of his cases died, not immediately, but soon after, of other complications. Still Jonnesco enthusiastically continues to operate; even extending, in his last four cases, the operation so as to embrace the thoracic ganglion. From these facts it would seem that sympathectomy in epilepsy must finally be abandoned, just as ligature of the vertebral arteries has been given over as useless if not harmful.

The physiologists claim that resection of the cervical sympathetic in animals subjected to experiment is followed by permanent trophic changes and atrophy of the brain. As yet no such results have been noted in man. The operation is still too new, only four years old, to demonstrate what ultimate deterioration may result. Thus far, however, the beneficial results have remained permanent and unless some remote baneful effects should be reported to detract from the value of the operation, sympathectomy will eventually receive a permanently recognized position as a surgical procedure in glaucoma, exophthalmic goiter, and other allied neuropathic diseases.

In this study I am largely indebted to the kindnesses of Dr. James Moore Ball of St. Louis, Dr. M. Hartwig of Buffalo, and Dr. B. Farquhar Curtis of New York for much valuable suggestion, information and material given by personal letters and clinical matter forwarded to me.

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THE QUESTION OF DRAINAGE IN APPENDICITIS.

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NEARLY every point of technic in the operation for appendicitis has, in the recent past received its full share of comment from men who have possessed liberal educations, broad clinical experiences and with records of merit in their labors. The past few months, however, has witnessed so many radical changes regarding the treatment of the wound that I take the liberty of attempting at this time to view the subject from the standpoint of drainage, or more properly speaking non-drainage.

Much of our knowledge concerning abdominal drainage we owe to the labors of the gynecologists; they recognized the fact that when abscess cavities were ruptured intraperitoneally that little or no harm came of it, providing it was *not* walled away from the rest of the abdominal cavity and that the septic material could be presented to a larger portion of the peritoneum. Septic areas in their field were cleansed with as much care as possible and the abdomen thoroughly irrigated and closed with good results. These patients showed a decrease of hernias and resulting ileus following operation and presented an earlier and firmer union, and a more tranquil convalescence, than when the cavity was drained.

About this time, general surgeons held that many of these gynecologic conditions were cases in which the pus was sterile, hence, the peritoneum was able to dispose of it without serious results; in time, however, it was shown by experiment, as well as in practice, that the peritoneum was capable, and did dispose of large amounts of specific pus, pus proven by examination to contain the staphylococcus, streptococcus and bacillus coli communis organisms, which for the most part are present in many cases of abdominal surgery.

It is an open question still whether it is the drainage or the peritoneum that takes care of the larger amount of septic material; when the fact of rapid formation of pus is considered, it is hardly possible to believe that it is all removed by drainage, for capillary attraction, the physical force to which drainage owes its application, is at best a slow process and if the peritoneum does not take care of that which is not removed by the drain, how can we explain its removal; again, granting that the gauze removes all the pus, how does the peritoneum tolerate the presence of pus that must accumulate at the bottom of the drain, during this drainage process, if it be so susceptible to infection?

That this pus is produced very rapidly cannot be denied, else we would not have the fulminating types of appendicitis. All of the authorities recognize this fact when they urge an early operation. Who has not noticed in using the glass drainage-tube how frequently pus can be drawn from it in surprisingly large quantities. All this goes to prove the inefficiency of our attempts at drainage, and not only this, but the mere presence of the drain is productive of much harm; it unquestionably produces a hyperemia and congestion of the peritoneum in closest proximity, thereby lessening the absorption by disturbing its normal currents, it also produces adhesions about the drain which in turn lessens the area of the peritoneum exposed to the infection, thereby limiting its important function of absorption.

It is believed that so long as the gauze or tube is sterile, little or no harm can come from its presence; this is erroneous; the peritoneum will tolerate no foreign body, sterile or otherwise, without a disturbance of its function, besides interfering materially with its healing.

It is known that the peritoneum is capable of disposing of large quantities of pus under favorable conditions, and chief among these conditions is equal distribution over the peritoneal area; in order to do this it becomes necessary to use some agent which will put pus and pus-forming elements into solution, and in choosing this agent some very important points to be desired may be mentioned.

1. Sterility. One species of bacteria is often inert or latent until another species is introduced, thus combining the efforts of both, and a heretofore latent sepsis becomes a rapidly active infection.

2. Power of holding in a homogeneous solution the pus as well as the blood and blood-clots incident to the operation, in order to permit of equal distribution over the peritoneal cavity. The presence of blood-clots in a septic cavity canot be overestimated; no richer culture medium is known for bacteria and these must be protected from invasion.

3. Stimulation of absorption. It is most desirable to remove all septic material as soon as possible and this is made possible by the power of absorption of the peritoneum which is enormous, namely, from 3 to 8 per cent. of the body weight in one hour.

Hot saline solution is very effective and fulfils all the requirements; it can be made sterile and introduced sterile into the peritoneal cavity; it possesses the power of putting pus and pus-forming elements, such as blood and blood-clots into solution, thus removing the danger of fresh invasion of infection, and being hot, temperature 105° to 108° F., is a most active stimulant to the peritoneum and its use is unattended by unpleasant sequelæ.

Increased hepatic activity is another step in the right direction. Such activity produces a detergent influence in all cases of general

sepsis as well as in localized infectious processes, besides removing from the entire physical economy various substances which in themselves would aid, if not produce, septic conditions; this function is certainly worthy of careful study, as it will increase the resources of the surgeon in combating infection, since through the portal circulation we can increase the general resistance against bacteria.

Posture does much in these cases; elevation of the foot of the bed a few inches tends to gravitate the fluids toward the diaphragm and absorption is increased in this locality since the diaphragmatic lymph-spaces afford an avenue of rapid absorption of sepsis held in solution.

I herewith take the liberty to report some cases where these ideas were put in practice.

Case I.—Mrs. M., age thirty-two years; history of attacks of recurrent appendicular pain for over a year, lasting a few days and subsiding; last attack had continued for four days; tumor well defined; temperature 101.4° F., pulse 120 and threatening.

Incision was made parallel to Poupart's ligament and about 1 or 1½ inches internal to it; as the subperitoneal fat was reached, it was found to be edematous and oozed freely on incision; the peritoneal cavity was opened and the appendix appeared in the wound without search and was fully four inches long, with a peri-appendicular abscess containing about two ounces of foul pus; the appendix was removed and the stump penetrated with a probe to remove all doubt of constriction, then treated with pure carbolic acid, inverted and there secured with a purse-string suture of fine catgut. The canal of the amputated appendix showed plainly the evidences of previous inflammation by a constriction, below which was a small abscess. The entire peritoneal cavity was then thoroughly flushed with hot sterile salt solution, while a gloved hand searched the abdomen for more abscesses; none being found the fluid was gently pressed out and the cavity wiped with sterile gauze, then filled again with the hot saline solution and the wound closed by through-and-through sutures of silkworm gut, the wound was then thoroughly washed with hydrogen dioxide and dusted with a powder of iodoform and boric acid (1 to 7); sterile gauze was then applied, and a sterile bandage held all in place.

Just before coming from the table the patient was given a high rectal enema of a quart of the hot saline solution and put into a bed with the foot elevated about four inches. That night she suffered from some nausea and gas and pains incident to the operation, and next morning she had a temperature of 100.2° F., pulse of 96; an ounce of hot solution of sulphate of magnesia was ordered and about noon that day the bowels were moved freely. The stool was brown in color and liquid. Evening temperature was 99.6° F., pulse 90; the following morning found a normal temperature, pulse 82 where it remained; on the tenth day the stitches were removed and the wound was found completely closed, the scar was washed with alcohol followed with sterile water, on the twelfth day she sat up and on the fourteenth day was dressed, and has since gone on to a very satisfactory recovery.

Case II.—Laborer, German, age twenty-eight years, no history was obtainable. He was found in a moribund condition; blood-count revealed a high leucocytosis—28,000. There was an evident tumor, rigid abdominal wall. Incision was made in the same line as described. Rapidly reaching the colon, the appendix was found adherent behind the cecum. In delivering it into the wound a pus cavity was broken which discharged a large quantity of thick pus. The appendix was ruptured and contained a small concretion, the size of a small pea. After it was amputated the canal of the stump was found to be pervious, and it was treated in the manner of the previous case. The cavity was then thoroughly irrigated while the gloved hand made search. An abscess was found in the region of the liver; this was broken down and freely flushed with the hot salt solution, the tip of the tube being carried near the site. The cavity was then emptied and dried with a gauze sponge, after which it was filled with the hot solution and closed. This was followed by a high rectal enema, an ounce of sulphate of magnesia in hot water was then ordered to be given as soon as consciousness was restored. Evening temperature 100.3° F., pulse 96; next morning the temperature was 102° F., and the pulse 110. After the evacuation of the bowels occurred, there was a declining temperature and a falling of pulse; stitches were removed the tenth day, and convalescence was uneventful and complete.

Case III.—L. S., age thirty-two years, teamster, gave history of recurrent pain in right groin. Onset was sudden, nausea and vomiting, temperature 101° F., pulse 120 in the forenoon, evening temperature 103° F., pulse 132.

Operation next morning, tumor well marked, abdomen rigid. On entering the peritoneal cavity a large amount of pus was evacuated and an abscess was found walled away from the entire cavity; adjacent coils of intestines were massed by the adhesions of plastic exudate; appendix was found in fragments in the abscess cavity; stump was amputated and treated with carbolic acid, inverted and held by fine catgut. The cavity was then thoroughly flushed and after drying, the intestines were carefully freed of adhesions and while it was impossible to remove all the adhesions, care was taken to leave no bands that could afterward cause trouble by entrapping coils of intestines and produce ileus. After the adhesions were freed the abdomen was again filled with the solution and was searched for

abscesses. None being found the wound was closed with as much hot salt solution as could be retained; the high enema was then given. On the second day after operation the temperature rose to 102.6° F., and pulse to 120, but subsided at night and on third day the temperature was 98.6° F., and pulse 86; the stitches were removed at the usual time, and while recovery was slower than in the preceding cases, it was uneventful and complete.

Case IV.—H. W., age twenty-four years, an electric lineman, gave previous history of pain in the right groin for about one year. Nausea and vomiting were present, intense pain, no tumor evident, abdomen rigid, temperature 102.4° F., pulse 128.

Incision was made in the same site as in previous cases; the appendix was found to be gangrenous at tip and completely sloughed away from the cecum, being held in place by the meso-appendix. A pus cavity was ruptured in delivering the appendix; slight adhesions to colon behind were found. As the appendix was lifted up and cut away, it slipped from the grasp of the tissue forceps, striking on the internal lip of the wound at about the center of its extent. The abdomen was then treated as has been described by flushing the cavity while search was made, this was then emptied and again filled and closed retaining the salt solution. The history was much the same as in the preceding cases until the seventh day when there occurred a sudden rise in temperature from normal to 102.4° F., rapid pulse 134, bowels were confined, appetite poor, and there was a feeling of general indisposition. The dressings were removed, and the wound inspected. About the middle of the incision on the internal side a slight oozing of pus was discovered, the suture near it was cut and removed and perhaps an ounce of pus escaped from a mural abscess. This was irrigated with hot saline solution and redressed daily until the tenth day, when all the stitches were removed; at that time the small abscess was completely healed, and the patient was able to be about the street in three weeks from the day of operation.

It may be merely a circumstance, but it is possible that the infection of that wound could have occurred by the amputated appendix striking the edge of the wound in its fall, for the site was identical.

Case V.—R. H., male, age eleven years, temperature 102° F., pulse 120, abdomen rigid and tumor evident.

Incision made over tumor. On entering the abdomen, a large amount of pus escaped. The appendix was found very much enlarged and elongated, with perforation and contained a very large concretion. It was amputated and stump treated as in previous cases. The abdomen was then irrigated with the hot solution. During the search another abscess was found in the left iliac fossa; the tip of the tube was carried to the site and thoroughly flushed, this was then wiped away, and the abdomen filled and closed. After the stitches were tied and the wound treated with hydrogen dioxide, it was discovered that a large gauze pad was missing, search about the room failed to reveal it, the abdomen was reopened and the pad found and removed. As the patient was in very bad condition, the stitches were replaced very hurriedly, the high enema was given as usual, the patient put to bed. On the second day the temperature was 101° F., pulse 130, but both subsided at night on the third day. the temperature was normal and the pulse 86. On the eighth day there was a decided chill, followed by a sudden rise in temperature to 102.3° F. The dressings were removed, a large mural abscess was found, which was irrigated and packed with gauze and dressed daily. On the fourteenth day all stitches were removed, on the twenty-first day the wound was completely healed and recovery was complete.

Case VI.—C. C., male, student, age fourteen years. Was seen at first complaining of pain in right groin, nausea and vomiting, temperature 99° F., pulse 120; next evening temperature 100° F., pulse 130.

Operation performed the following day. The appendix was found to be very much elongated and hyperemic, no pus was found, no concretion present. On section of appendix a small amount of pus escaped. The salt solution was used as already described, and the abdomen searched with negative results and was then closed full of the solution and dressed in the regular manner. The temperature for two days was 99° F., and pulse gradually declined from 96 to 84; after the third day the temperature reached normal, pulse 84, where it remained. On the tenth day all stitches were removed and on fourteenth day the patient was dressed; recovery complete.

In each of the above cases the tube of the irrigating bag was rendered sterile by carbolic and bichloride solutions so that it might be carried anywhere in the abdominal cavity and thorough flushing of any septic area could be performed; during this process the gloved hand searched the abdomen for localized areas of infection and it might be well to remember that the region of the liver, the left iliac fossa, the fossa between the rectum and the bladder, and the right iliac fossa are common sites for such abscesses.

The hand makes the solution of sepsis more certain since any and all regions may be palpated, and if this is done systematically and each region of the peritoneal cavity thoroughly explored before moving to another, complete solution may be assured and the safety of the proceeding unquestioned. After the search is complete the fluid is gently pressed out and in doing so it floats the floccular material and by removing this lessens the danger of active

processes. If localized infection has been found the region is carefully mopped out with a sterile gauze pad, and the tube replaced in the wound and the abdomen closed as full of the fluid as can be retained.

Whenever practicable two drams of the aromatic fluid extract of cascara was given before operation, followed by an ounce of magnesium sulphate in hot solution as soon as consciousness was regained; this procedure lessens the danger of intestinal paresis by stimulating peristalsis, besides increasing absorption. The foot of the bed was elevated about four inches during the first twelve or eighteen hours.

In reviewing these cases it is at once apparent that where the technic was unquestioned the results were most satisfactory; in Case IV. the infection undoubtedly occurred by the amputated appendix striking the edge of the wound in its fall; this infection did not take place in the peritoneal cavity; it was a mural abscess and yielded readily to treatment.

In Case V. I think that infection occurred during the second suturing, as a result of faulty technic, as the sutures were placed very hurriedly, time being an element to be seriously considered.

While these cases may not appeal to many to be of statistical value it must be granted that they prove what can be done without drainage in appendicitis. It seems that the general trend of the times is to do without drainage in all classes of surgery, as far as the removal of pus is concerned, drainage must be used in surgery of certain glands, ducts, and cysts in order to remove the irritating fluids that would interfere with the processes of healing, as in cases of surgery involving the stomach, spleen, pancreas, liver, gall-bladder, and urinary bladder. The maxim given with so much wisdom a few years ago, "When in doubt, drain" is about to be revised to read "When in doubt, do not drain."

NEW METHODS IN CHARITY, WITH BETTER RESULTS AND AT LESS COST.

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WHEN the Hon. James A. Roberts was State Comptroller, in 1896, he wrote some true, pungent and striking things—things that ought to engage the attention of charity workers throughout the State concerning the cost, the *ever-increasing* cost, of the public charities of this great State. In his report for 1896, Mr. Roberts says: "The State now has invested the sum of $19,323,245.42 in the way of buildings and permanent improvements for the defective and dependent classes; classes that must *always* be cared for by the State." It costs the State $5,200,000 annually to care for this immense army. The bulk of this, fully three-quarters of it, goes to care for the 20,000 insane.

The foregoing figures have increased since then; but I use them partly because they are less astounding, and because they are the latest I was able to secure that gave the information I desired in a specific and definite manner.

Pray understand at the outset that I am not opposed to State charities—indeed, far from it; but if better means can be devised at less cost, then I am firmly in favor of such better means at less cost. The question is: Can we care for the State's great army of the defective and dependent classes without lessening the value of the care they now receive, and do it at less cost? I ardently believe it can be done, and I will try, in the briefest manner possible, to tell you how. The means to be adopted come under the following heads: (1) Prevention; (2) Construction; (3) Maintenance; (4) Proper Edueation.

Prevention, of course, means placing legal restrictions upon the increase of the defective and dependent classes. That the State, or the government under which we live, has the right to do this, there should not be the shadow of a doubt. Just as society has the right to protect itself against any invading foe that threatens the fabric of its social organism, by organizing the equipping armies and by doing what fighting must be done, so it has the same right to make laws, and enforce them, that will cut off or prohibit the ever-increasing army of defective and dependent people that must in time be cared for at the expense of the State. These opinions are self-sufficient to sustain the point.

The next step is to appoint a commission, the aim of which will be to frame laws designed to correct this growing evil. This commission must needs go slowly; it must not make any more mistakes than possible; it must not bring down upon its head the wrath of a whole people by drafting measures too drastic at the outset. It is harder, I know, to go upward and forward than it is to go downward and backward. Let progress be steady, but sure; otherwise defeat of the entire scheme would be invited at the outset. Some States, I believe, have enacted laws to prevent the marriage and intermarriage of epileptics.

The first thing, therefore, is prevention, and the first thing to be done to carry out prevention is to prohibit the marriage and intermarriage of defective, dependent and diseased people, people whose progeny, once created, are bound, in the course of human events, to become public charges. We see bacteriologists throughout the world toiling incessantly to devise means to prohibit the origin and the spread of communicable diseases, and I could give you a long list of men who are spending the better years of their lives in the study of means to prevent one disease only, such as tuberculosis, or yellow fever, or some disease of that kind. Why cannot we, who devote our lives to the care of those mentally-stunted, ineffective, blind, and nothing but dregs of society, do something toward stopping their

production? Let us check, as well as maintain; prevent, as well as cure. Let us begin at once. Let us appoint a commission to take up this matter and drive it home. Action, intense action, vigorous and everlasting action, is the only thing that is demanded. Set that at work, keep it going, and, rightly going, you are bound in time to gain the point.

Construction is the second point I would bring up. I do not quibble over terms, nor fear to express conditions of the past. I have no hesitancy in saying that nine-tenths of the great public charitable institutions of this State that have been built in the past have been built in the form of great, towering, massive structures, more to satisfy a local pride than to create a suitable home for those for whom they were devised. This is all wrong. For the life of me I cannot understand why a person of feeble mind, or an idiot, or an epileptic should require a home one bit more colossal than that occupied by the ordinary, well-to-do artisan or tiller of the soil. The argument is used that "This building is for the State, and the State builds for keeps." So do others, who are thrifty and wise. The State should not build cheap or shabby structures, but it should build simple, well-constructed homes. In five years' experience at the Craig Colony for Epileptics, I have come to know that suitable homes can be built for a vast majority of the State's wards at a cost not exceeding $400.00 a bed; indeed, under suitable conditions, I am satisfied this might be further decreased. We are housing to-day, at the Craig Colony for Epileptics, 612 epileptics in buildings none of which cost over $450 a bed, and more than one-half of which cost less than $400 a bed. Nor have we built poorly, for we have built well. We have founded our buildings upon a rock, and I am satisfied they will endure for a century. Could you ask for more?

If the State has more than $19,000,000 invested in permanent buildings, and if it could reduce the cost of construction one-third, and if it is expending from $1,000,000 to $1,500,000 a year for new construction, it could save at least $400,000 a year in new construction—which sum will go a long way towards maintaining those persons already under State care—by building simpler homes for these people. It is what they have been accustomed to that we wish to give them; it is what their condition demands, and there is no valid reason why any of them should live in expensive structures, costing anywhere from $1,000 to $3,000 a bed.

Maintenance is the third question to be considered. A great bugaboo, an unnecessary bugaboo, of great proportions and tremendous possibilities, has been raised over *per capita* cost. The result has been competition on the parts of the various superintendents and managers of the great public institutions to bring down their *per capita* cost lower than the *per capita* cost of some other institution. This is all wrong—disastrously so; let the charitable institutions spend what they need for proper and legitimate purposes; let them spend *more money* on the care of the *acutely insane* and *less money* on the *chronic insane*. This applies likewise to all the charities of the State. We have not yet learned to classify properly; or, if we have learned, we do not put our knowledge into practice.

It is time that we begin. Let us separate the *absolutely incurable* and the *hopeless* cases from those that may be cured. Take the insane, for instance. I made a canvass of the 21,000 insane in this State last May and found, according to data given me by several enlightened superintendents, that fully 5,000 of the chronic insane living in the great State hospitals to-day could be colonized in small agricultural buildings on a vast tract of land, where far less money need be spent on their care. These superintendents were heartily in favor of the scheme.

I would advocate the colonizing of 4,000 or 5,000 of the chronic insane in one vast colony; or two, if it is thought best. Build for them cheap, simple, but good and substantial homes. Organize these places just as the State hospitals are organized. Give them a superintendent, a good corps of physicians, nurses and attendants, and stint them in nothing needed for the comfort and welfare of their charges. Make these colonies hives of industry and activity. Instead of the *per capita* cost of this number being $180 or more a year, I am confident it could be brought down in time to $100 a year, or less. Then take from the difference some of the amount saved and build in connection with the great cities, or centers of population, like New York, Albany, Syracuse, Rochester and Buffalo, psychopathic hospitals or reception hospitals—give it any name you choose, so long as you rob it of any designation that would make people feel that it is a place where lunatics are kept. Put into this building the best scientific brains that money can buy; equip it with the best surgical and scientific instruments, and all instruments of study, investigation and precision that man has invented. Provide it with the best possible nurses; in fact, leave nothing undone that will tend to bring about recovery in curable cases.

Do not make these special hospitals too large; make them small; so small that, with a proper hospital corps, each man will retain his identity, not be merely a member. For New York build, say, for 300 patients; for Albany, 100; for Rochester, the same; for Buffalo, 150. Let the acute and curable cases be sent there first for a year, or a year and a half; but let the period be elastic, not fixed. If they do not recover, then transfer them to the present existing great hospitals. Another advantage would accrue from the construction of these buildings in the great centers of population. Physicians, who are graduated by the hundreds in all the great cities where there are medical schools, could use these patients as object lessons, as clinical material. The result would be that the young physician who goes out into practice would have a far better

knowledge of diseases of the mind than the majority of them have to-day. This would aid vastly in the early treatment of diseases of the mind.

This is how I would treat the matter of maintenance. *Less money* for one-fourth of the insane, and *more money* for a certain per cent. of the acutely insane, with the idea of curing these at the very outset, if possible. I believe that the teaching of pathology should be done in connection with these hospitals for acute cases. I believe all the scientific work done in connection with the insane should be done in these hospitals, and that as many young physcians as possible should have the advantage of the hospitals. Build in connection with them dormitories in which physicians might live, so that they might be intimately in contact all the time with their difficult and important work.

Education is the next problem. The word *custody* is a most disastrous term applied to the charity wards of the State. It should never have been applied; it is now time to abolish it. Let us say that the charity wards of the State are under treatment, not under custodial care. For many of the insane, for many more of the epileptics—we have 100 of them at the Colony to-day out of 600, for many of the teachable idiots, and for most of the feeble-minded, we need a better system of education; an education that tends to put into the finger-tips of the individual taught a form of education that the individual can use in the acquisition of his daily bread. It is little less than absurd to attempt to force a $5,000 education into a $500 brain; it shows a lack of judgment on the part of those who are doing it, and it results in practically nothing. The State should pay more for good teachers, and an army of teachers should be created over and above that in existence at the present time. To me, it is a pitiable and depressing sight to go through many of the great State institutions and see its charges lined up in long rows down the sumptuously-furnished corridors, with folded hands and all idle; very few, if any, of them at work, and those who are at work are largely improperly employed under unskilled tutorship. The proper education of those of the State charges who should be taught would go far, I am satisfied, toward further reducing the *per capita* cost.

To sum up, then, I would recommend the following:

1. Prevent insanity, epilepsy, imbecility, idiocy and feeble-mindedness, as far as possible, by making it impossible for persons so afflicted to marry.

2. Build less expensive structures in which defective and dependent State charges shall live.

3. Maintain at less cost the cases that are chronic and incurable, and maintain at greater cost, to stimulate recovery, those that probably can be cured.

4. Give those that ought to have it an education that they can use, either in the institution that cares for them, that the cost of their maintenance may be lessened, or in the outer world, when they leave the institution, after the State has done its work well and turned them back into the great business current, as nearly normal men and women as science and art can recreate them.

MEDICAL PROGRESS.

Pendulous Abdomen.—L. PETERS (*Annals of Surgery*, Mch., 1901) states that surgical removal of redundant abdominal fat when it causes symptoms amounting practically to those of a benign neoplasm is justifiable. He reports a case for Dr. H. A. Kelly of a woman who several years ago had fatty breasts taken away aggregating twenty-five pounds in weight. Dr. Kelly recently ablated a large segment of her abdominal fat which weighed nearly seventeen pounds. The result was satisfactory.

Treatment of Lead-Poisoning by Electricity.—J. AURIOL ARMITAGE (*Birmingham Med. Rev.*, Feb., 1901) has obtained thirty-seven cures, either partial or complete, in forty cases of severe chronic lead-poisoning, with paralyses, by the use of electrical baths. The apparatus used consisted of an ordinary large porcelain bathtub carefully insulated, special care being taken to insulate the inflow and outflow pipes. A large carbon at the foot of the tub formed the negative electrode. A small carbon, wrapped in linen rag and movable was used as the positive electrode. The battery he used chiefly was one of 120 large Leclanché cells coupled up in threes, and when freshly charged giving an electromotive force of about 60 volts. As the commencement of treatment from 84 to 120 cells were required to produce the desired effect, but at its close from 24 to 60 cells gave the same result. The feelings of the patient were the guide to the strength of the current. The best results were obtained when the current reddened the skin without causing actual pain. The patients were usually immersed in the bipolar bath for fifteen or twenty minutes. Armitage also used the monopolar bath, the carbon in the tub being the negative pole, while the positive pole was a brass bar laid across the tub outside of the water and grasped by the patient. The treatment was not complicated by the use of drugs, especially potassium iodide. The water, at a temperature of 98° F., covered the patient except his head. In the monopolar bath a greyish deposit was noticed on the brass rod after the bath. This proved to be lead which the writer thinks came off the patient's hands and not out of his system. In addition to the general bath the affected parts of the body received special treatment by being rubbed with the positive electrode. Armitage thinks that the rapid improvement obtained in these lead-poisoning cases was due to the electricity splitting up

the lead salts in the body, so that the lead formed new combinations, insoluble and stable. He reports in detail a number of cases showing the rapid improvement produced by these electric baths.

Hydro-Salpingitic Torsions.—F. CATHELIN (*Revue de Chirurgie,* Feb. 10, 1901) states the symptomatology of torsions of the pedicle in hydro-salpingitis in the following terms: The prodromata are usually: pain of dull character, recurring in irregular crises, situated in the pelvis or either iliac fossa, radiating into the loins and lower extremities; regular normal undisturbed menstruation; hemorrhage, as a rare accompaniment of the pain-crises; leucorrhea as the sign of uterine congestion; tumor palpable to the patient or evident by its pressure symptoms. Acute torsion shows: pain lightning, horrible, violent and syncopal, in either side or general in the abdomen, excited by some definite exertion as a rule, controlled only by morphine hypodermatically, radiating usually downward and laterally; vomiting but never in the recorded cases, fecal; metrorrhagia, described by Pozzi as "*metrorragies distillantes*" not constant or reliable; intestinal obstruction, by paralysis, simulating the truly mechanical and often suggesting it; constipation as the rule; diarrhea as the exception; localized, usually aseptic peritonitis; feeble rapid pulse; fever exceptionally; facies of shock; usually distension, rarely retraction of the abdomen; exceedingly great sensitiveness to palpation; a tumor, if previously known much augmented, or if not previously unknown manifest to patient and examiner, due to venous obstruction, situate usually in the abdomen or superior strait or rarely in the pelvic cavity, elastic or fluctuating, usually non-adherent. The twisted pedicle is occasionally palpable (de Warnek's sign). The chronic cases in their paroxysms are like the acute and the history of recurrent crises supplies as a rule the diagnosis. Extirpation of the cyst and its pedicle is the treatment.

Varicocele.—W. H. BENNETT (*Brit, Med.* Jour., Mch. 2, 1901) says that fatty degeneration of the testicle is due to the fact that in the usual operations all balance between the arterial and the venous currents is destroyed. In a series of two hundred cases he has had no such accidents while doing the operation so that not only the spermatic veins but also the spermatic artery is obliterated, while the veins and arteries of the vas deferens are left *in situ.* His procedure is to expose the cord with its envelope of fascia just below the external abdominal ring and then separate the vas deferens and its vessels from the whole of the rest of the cord and without denuding the vessels of the envelope of the fascia. Thus the veins and artery of the spermatic group are obliterated and no loss of balance occurs. The nutrition of the testis is carried on by the artery to the vas deferens and twigs from the tunica vaginalis to the testis. Aside from this special feature, all the other steps of the operation are the same as in the common open operation.

Treatment of Drug Habits.—DAVID PAULSON (*Medical Standard,* Mch., 1901) discusses the different methods of cure of these habits, such as the absolute withdrawal of the drug without supporting measures, the substitution method, the tapering off process, and the rapid withdrawal of the drug with physiological supporting measures. The treatment he has found most succesful is the following: The patient must have the attention of trained nurses, as he will need constant attention for the first few days. Not only must the morphine or cocaine be banished, but also liquor and tobacco or any other similar habit must be stopped. The diet should be such as is absorbed readily, and introduce nothing into the system that will tend to excite the already over-irritated nerves. Kumyss, butter-milk, hot malted nuts, and an abundance of fruit and fruit juices are well borne even when the patient is at his worst. Meat, and particularly beef-tea, aggravates the patient's condition. As the patient has usually taken a little more than the average dose before he puts himself under the physician's care, the nurse has little to do during the first twelve hours but watch the patient and see that he does not secure more of the drug. At the first appearance of restlessness, the nurse should take the patient in a wheelchair to the bath-room, and give him a neutral galvanic bath, with the water just at the temperature of the skin with a mild galvanic current passing through it. This is soothing and the patient can remain in it for an hour or more. The bath is followed by gentle massage, then by hot fomentations to the small of the back or wherever the patient feels pain. Then the patient's entire body is enveloped in a sheet wrung as dry as possible from water at a temperature of 80° F., and covered with enough blankets to produce a moderate reaction, but not perspiration. This is a very sedative measure. As soon as the patient begins to become uneasy this should be removed, and the patient wheeled back and forth in a wheel-chair. Then he may receive another neutral bath or a mild galvanic current to the spine. If the heart's action seems to be weakening, cold compresses are applied over the cardiac region, or alternate applications of hot and cold. If the patient is markedly prostrated one or two small doses of morphine may be given. For the diarrhea that comes with the withdrawal of the drug Paulson gives every two hours from the beginning large doses of the bismuth compounds with small doses of coto bark fluid extract. During the first thirty-six to forty-eight hours the patient has only secured snatches of sleep, but the struggle with the morphine is over.

He must have tonic treatment and a continuation of the neutral baths for some days, until he can get a good night's rest. His general system must be brought up to par by exercises, various hydriatic measures, and gradually increased diet. The patients are invariably cured after a few weeks of this treatment.

Saphenaresection.—P. Herz (*Deut. Zeitsch. f. Chir.*, Vol. 58, pt. 3 and 4) says that recurrence of the varices after the Trendelenburg saphenaresection are not uncommon. Therefore Habs has introduced a modification which appears to avoid these lapses. According to the arrangement of the collateral circulation beneath the skin one or more short transverse incisions are made joining the longitudinal incision. In this manner many of the collateral veins themselves varicose and productive of relapses are tied and ablated and the return flow determined though the deep intermuscular veins.

Leucemia and Pseudo-Leucemia.—In the *Inter. Med. Mag.*, Mch., 1901), C. H. Miner reports a case of typical leucemia and contrasts it with a case of so-called splenic anemia or pseudo-leucemia. The patient was a Pole, nineteen years of age, who was taken with severe pain in the left side in 1895 and his skin began to grow darker in color. Since then he has had several similar attacks of pain and his spleen has gradually been increasing in size till it extends seven inches below the free border. His skin has continued to grow darker, he has had frequent nosebleeds, with purpuric attacks, edema and hematuria. The blood examination has not varied much, there being about 2,500,000 red blood-cells, 4,000 to 8,000 leucocytes and a hemoglobin of 35 per cent. to 40 per cent. A differential leucocyte count showed: Polynuclears, 75 per cent.; small mononuclears, 16 per cent.; large mononuclears, 4 per cent.; transitionals, 3 per cent.; eosinophiles, 2 per cent. No malarial organisms, no nucleated red blood-cells or myelocytes were found. Osler says that it seems probable that in these cases the enlargement of the spleen and the anemia are both due to the same cause as yet unknown. It is better provisionally to group these cases of splenic enlargement with anemia, and without lymphatic involvement, under the name splenic anemia. The treatment is that of severe anemias. The spleen is sometimes removed in chronic cases with recurring hemorrhages.

Enlargement of the Phalanges.—As causes which may lead to thickening of the end-phalanges of the fingers A. Dennig (*Münch. med. Woch.*, Mch. 5, 1901) gives the following: (1) Disease which leads to purulent or gangrenous changes such as tuberculosis with cavity formation, bronchiectases, empyema, cystopyelonephritis and dysentery; (2) infectious diseases and chronic intoxications, such as pneumonia, pleurisy, lues and perhaps alcoholism; (3) cardiac disease, especially congential; (4) malignant tumors, and (5) diseases of the nervous system, such as syringomyelia and neuritis. A unique case which cannot be classified in above list was a man in whom pyloric stenosis following ulceration was found. Here the thickening entirely disappeared with the surgical cure of the disease. As a result of the examination of many cases with Röntgen rays the author believes that the hypertrophy is due solely to congestion and hyperplasia of the soft parts about the bone.

Ovarian Secretion.—According to S. W. Bandler (*Med. Rec.*, Mch. 16, 1901) there is a current in the peritoneal plasma which carries the freed ovum into one or other of the Fallopian tubes. Through the tube the ovum finds its way into the uterus in thirty hours. This ovulation does not cause menstruation, but is due to the same cause, namely a special ovarian secretion. If this secretion is diminished in amount, ovulation may take place without menstruation, or both may fail. The common causes of amenorrhea are atrophy, ill-development, or absence of uterus, chlorosis, lactation, and adiposity. In chlorosis the ovarian secretion is not sufficient to induce menstruation; during lactation the secretion is diverted to the breasts; and in adiposity the lack of secretion is a cause of the fatness, such girls being well-developed with fatty breasts, but with poorly-formed genitalia. An atrophied uterus tends to be accompanied by bodily weakness, both being due to a diverted ovarian secretion, as in prolonged lactation. Many cases of dysmenorrhea occur in girls with hypoplasia of the uterus, but with well-developed ovaries, the ovarian secretion stimulating muscular contraction of the uterus, at the same time congesting its mucosa. Chlorosis, Basedow's disease, the ill-effects of the menopause and castration, osteomalacia, eclampsia, and chorea are also in large measure directly or indirectly due to lack of this secretion. Clinical reports give ovarin as the best remedy for all these conditions; and though it is not probable that ovarin replaces all that the ovaries should furnish, or that it can easily overcome long-existing injuries, yet it must begin a new era in the treatment of diseases of the female.

Laboratory Milk.—A good milk, writes W. P. Northrup (*N. Y. Med. Jour.*, Mch. 16, 1901), is a mixed milk from herds of native breeds. Clean milk means that in which no bacterial toxins have been produced. A few bacteria do no harm, toxins poison. Laboratory milk is cooled below 40° F. within ten minutes of the milking, for at such temperature bacteria cannot grow. The cream is removed by centrifugation, the remaining milk being diluted and added to the cream according to the proportions required. Home-modification has often been a failure, owing to carelessness and ignorance of bacteriological cleanliness, and a mother's over anxiety to have the infant gain

weight. There are three formulæ necessary to remember: (1) For the newborn, fat 2 per. cent., sugar 5 per cent., proteids 0.75 per cent. (2) Low-average breast-milk, fat 3 per cent., sugar 6 per cent., proteids 1 per cent. (3) High-average breast-milk, fat 4 per cent, sugar 7 per cent., proteids 2 per cent. In from eight months to a year have the milk approximate cow's milk so as to wean the child. All feedings should be milk during the first year, mostly milk during the second year.

THERAPEUTIC HINTS.

Trinitrol.—HUCHARD uses tetranitrate of erythrol or trinitrol as a vasodilator of more lasting effect than amyl nitrite or nitroglycerin. The average dose is 0.01 cg. (gr. 1/6) every four hours.—*La Presse Méd.*, Mch. 6, 1901.

Lavage in Hematemesis.—Blood in the stomach stimulates the digestive act, causing increased peristalsis and the pouring out of gastric juice. This prevents the retraction of the bleeding vessel or clotting and favors a continuation of the hemorrhage. Linossier, therefore, considers lavage an indication in hematemesis. Bondet has obtained good results by treating simple ulcer of the stomach by lavage with a weak solution of ferric chloride.—*La Presse Méd.*, Mch. 6, 1901.

Mixed Feeding of Infants.—It is very common for mothers to give their nurslings a light pap, some milk, meat broths, toast, crackers, etc., without harm, and probably with benefit always after the fifth or sixth month. The indications for the use of artificial food as an auxiliary to human milk are: (1) Deficient quantity of mother's milk. (2) Deficiency in solids in human milk—a little cow's milk and meat juice may be a gratifying addition. (3) Excessive proteids causing colic and indigestion—some dextrinized gruel, condensed milk, or dextrin food, such as Nestlé's given just before nursing has a happy effect. (4) Diarrhea from human milk. Dextrinized gruel as above will answer. (5) Constipation—additional feeding acts well—two or three feedings a day of fat 4 per cent., proteids 1 per cent., sugar 7 per cent., or a few ounces of albumin water (white of one egg in 10 ounces of water) sweetened with cane sugar. Frequently oatmeal gruel relieves constipation, also the malted preparations, and pure butter. (6) The human milk is toxic. There are certain indications for the use of human milk as an aid to artificial feeding. Half to one ounce of human milk may be obtained by the breast-pump or cupping-glass, or by manipulation, and is added to the artificial food. It promotes the digestive and absorbing functions, tones the vascular system, and supplies antitoxic and bactericidal properties to the blood. The indications are: (1) Marasmus—Sometimes a little human milk for a week will start the baby on the right track. (2) Gastro-enteric infection—Clean out the alimentary tract, give large quantities of water, rice water, or barley water for 2 or 3 days; then add human milk to this, gradually increasing, until it can be replaced by cow's milk. (3) Rickets with tetany—Especially those cases with great irritability, laryngospasm, eclampsia, etc. With the use of an antispasmodic, preferably chloral, the addition of human milk to the artificial food greatly enhances the chance of cure. (4) Scurvy—Fruit juices, fresh cow's milk, white of egg, and human milk may be alternated.—*J. Zahorsky, Pediatrics*, Mch. 15, 1901.

Ergotine in Hemorrhage.—Ergot excites contractility in smooth muscle, especially in that of the uterus, but also notably in that of the vessels, especially the arteries. The researches of VAQUEZ show that the first manifestation is an increase of pressure in the venous system, and a lowering of pressure in the arterial system, followed, however, by a slight general increase in vascular tension. It does not affect the coagulability of the blood, therefore is not effective in the bleeding of hemophilia, anemia or jaundice. The hemostatic effect will be most marked in tissues rich in smooth muscle, most of all in uterine hemorrhage, somewhat in bronchial, not much in pulmonary hemorrhage, and very uncertain in epistaxis. In gastro-intestinal hemorrhage as in gastric ulcer, or typhoid fever, contraction is to be avoided for peristalsis may induce perforation, therefore ergot is not indicated, but in hemorrhoids it gives good results, although in general it is contra-indicated in venous hemorrhage. If a wounded artery is small so that clotting may take place during the stage of hypotension ergot is indicated, otherwise the secondary increase in tension will be harmful. ALFRED MARTINET prefers the hypodermic administration using:

℞ Ergotin "Bonjean" .....gm. 2.0 (ʒss)
Glycerini.....
Aquæ dest. ..... } aa gm. 10.0 (ʒiiss)

Inject 1 to 10 ccm. (♏xv—ʒiiss) in twenty-four hours.

In the continuous hemoptysis of passive congestion from heart disease one can prescribe 5 to 12 of the following each day:

℞ Pulv. digital .....
Ergotin "Bonjean" ..... } aa gm. 0.05 (gr. 5/6) in pil No. 1.

It may be used in liquid form:

℞ Ergotin .....gm. 1.0 (gr. xv)
Syr. aurant. cort
Aq. dest. ..... } aa ccm. 60.0 (ʒij)

For hemorrhoids employ a suppository of:

℞ Aq. ext. ergot gm. 0.20-0.80 (gr. iij-xij)
Ol. theobrom. .....gm. 4.0 (ʒj)
—*La Presse Méd.*, Mch. 6, 1901.

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SATURDAY, APRIL 6, 1901.

ADVERTISING IN THE PROFESSION.

We present in this issue an article by Dr. G. Frank Lydston, comprising a speech delivered at a recent symposium of the Physicians' Club of Chicago, which contains food for reflection. However ethical he may deem himself, the fact remains that the reputable physician must of necessity advertise in one way or another. It is so often difficult to draw the line that it is small wonder that some men lay themselves open to adverse criticism. The question is often one of good taste rather than ethics, and for some inscrutable reason the standard of what is and what is not permissible, varies with the locality. A man located in a country town may emblazon his specialty on his front windows and yet not lose professional caste. This is one of the glaring inconsistencies of our ethics, for the would-be high-toned city specialist cannot do the same and remain one of the elect.

Dr. Lydston is unsparing in his denunciation of the fee-commission business and justly considers it lower in the advertising scale than paid, column-rate "ads." in the daily papers. He very properly holds that the employment of advertising and drumming agents is of the same kidney as the fee-commission business. It would certainly seem that toleration of such methods by a profession which ostracises the advertising quack is absurd. In regard to newspaper notoriety, Dr. Lydston very aptly remarks that it is chiefly condemned by the man who does not get it. If we construe his meaning properly, he believes that there is a legitimate newspaper prominence open to medical men which helps the profession at large by making the doctor in general a more potent factor in the body social. He condemns, however, the exploiting of cases and the inviting of reporters to clinics. Dr. Lydston believes that the contribution of signed quasi-scientific articles to the public press will serve to down quackery by educating the people to a correct appreciation of the merits of scientific medicine. He holds that we must educate first, then try to legislate against quackery. There is much of truth in this view. It would certainly be better to let the public into our confidence first-hand, rather than to permit it to acquire misinformation from garbled and second-hand sources.

It is evident that Dr. Lydston believes that we are in the throes of an impossible attempt to make the ethics of a half a century ago fit accurately present conditions. This is the matter in a nutshell. While many may disagree most emphatically with some of his views, no one will question the frankness and fearlessness of Dr. Lydston's expressions, nor is any one likely to overlook the obvious fact that his views are based upon close observation of professional conditions as they are, not as we would fain believe they are. We believe also, that all will agree that, however unacceptable his views may be, he is actuated by a true spirit of professional altruism. He certainly is not trying to curry favor at court.

THE STATUS OF THE COUNTRY DOCTOR.

The position of the country doctor in England in the matter of position and influence, as set forth in a paper by Dr. Harry Roberts in the *Lancet* of March 16th, interests us as giving a very broad and hopeful view of the possibilities that lie within the grasp of our medical men to become a strong social power and influence in the small cities and towns in which they practise.

His experience is upheld by our own that to a large extent the village doctor has nowadays much of the influence formerly wielded by the parson, who used to be the only educated man in the parish.

With the greater culture that has come with the modern education of physicians there have come greater tolerance, greater sympathy and understanding, which are the basis of greater power and influence. By no means would he intimate that this culture should take the place of medical skill, but rather that it should supplant that old-time pomposity which has stimulated many an English wit to caricature.

This pomposity of the past he attributes to a lack of any general knowledge outside of medical and surgical information, as well as to a lack of humor. "Our venerable priggishness," he says, "our owl-like expression, our grave shakings of head, our solemn hat and coat, gave to the gods, and to any one who knows on what shallow pretence these absurdities were based, food for many hearty peals of laughter. Even now we are respectable or nothing. Strip us of our respectability and we cannot as a herd be told from a crowd of deacons—the same smugness and the same lack of humor, the same worship of the sacred Mrs. Grundy, the same fear of overstepping the stupid little laws and customs which prevail among the ignorant middle classes of our country districts."

Though class distinctions are not as sharp in American provincial life as in its English counterpart, it is none the less true that it lies within the physician's power to make country life less narrow and ignorant, more pleasant and cosmopolitan. On account of the intimate and peculiar relations with people of every class, broad-minded and sympathetic physicians may become the true directors of country social life.

On the whole we may conclude with Dr. Roberts that the position of country doctors is better to-day than it has ever been, and that if they play the game skilfully and fairly, and take to heart the satires of the humorists they may still further improve their status, their influence, and consequently their power of modifying the structure of provincial life. This is no despicable destiny.

DIFFERENTIATION BETWEEN HUMAN AND ANIMAL BLOOD.

ONE of the greatest questions in medical jurisprudence is that arising from our inability to determine the source of the blood stains found in criminal cases. There now comes to our aid the result of investigations made by A. Wassermann and A. Schütze in the Institute for Infectious Diseases in Berlin. (*Berliner klinische Wochenschrift*, February 18, 1901).

As a result of the authors' work, they have been able to demonstrate clearly the practicability of differentiating between blood of the human species and that of any other member of the animal kingdom. This also independent of the age of the blood stains. Their investigations are based on the work originally carried out by Bordet and later by Uhlenhuth. The former investigator proved that when an animal was injected subcutaneously with blood derived from some other species, certain products were produced in the blood of the former which had a specific influence on the red blood cells of the other animal when put in contact with them. These products were termed agglutinine and hemolysine for they caused respectively, coagulation and solution of the red corpuscles. Similar results were obtained when injections of milk from one animal were made into another. The authors, however, have pursued their studies further. They demonstrated that when cow's milk was injected subcutaneously into an animal, the resulting products in the blood of this animal would coagulate and precipitate the casein in fresh cow's milk, but not the casein in human milk or in goat's milk. Likewise, goat's milk would cause products which would not coagulate casein in cow's milk and human milk, but only that in fresh goat's milk.

From the result to the investigation of similar reactions with various animals' blood was a natural step. At first, human blood was used entire but as it was found that in order to obtain good reactions the blood needed to be comparatively fresh and the corpuscles intact, other means were imperative. These were the subcutaneous injections of human blood serum (entirely free from corpuscles)—each injection of about 10 c. c.—into the body of a rabbit. Five or six injections were made at intervals of two days. Six days after the last injection the blood was withdrawn from the animal and placed on ice for the separation of the serum. If a physiological sodium chloride solution of human blood or a diluted blood solution (with distilled water) be treated

by the addition of 0.5 c. c. of this prepared rabbit serum, at the temperature of the room, a rapidly-forming cloudy precipitate is produced which may be made more intense by subjecting it to a temperature of 99° F. in a warming oven. The question arises as to whether this precipitate is specific in character, *i. e.*, whether only human blood will thus react. The authors answered this by treating diluted blood solutions of all common animals; mammals, birds, fishes, altogether twenty-three species, with such prepared serum. In no case did the reaction just described occur. Only in a single instance can it be said to have been doubtful—and this instance in itself is highly interesting—namely, with the blood of a monkey. In this case the precipitate took much longer to form and was not as pronounced as with human blood. It shows the relation of man with ape in still another phrase—the albuminoid bodies in the one have a strong resemblance to those in the other.

All these experiments have thus far been with freshly prepared blood only. In order to demonstrate the practicability of the test with all blood notwithstanding its age, Wassermann and Schütze prepared specimens of all kinds of animal blood and allowed the blood stains to dry and lie about for three months. In this time, the characteristic changes to methemoglobin had occurred and the blood spots had become dirty brown in color. The spots were washed out with salt solution and treated as above being placed in a warming oven at 99° F. to insure better results. Also, the solutions were first carefully filtered in order that a perfectly clear and pure liquid should be used. In about twenty minutes the specimens were examined and the results bore out everything that had been hoped. The human blood solution was clearly in a state of cloudiness while all the others were unchanged. The blood solution of the ape had a faint trace of beginning precipitation. These reactions therefore will serve in any cases of blood examination, where the source of the blood is in doubt.

How important such a decided advance in medico-legal examination is, it is not necessary nor incumbent upon us to state. Suffice it to say that the results are brilliant and the field they open for further research practically limitless.

ECHOES AND NEWS.

NEW YORK.

New York Medico-Surgical Society.—At the annual meeting of the New York Medico-Surgical Society, held at the Hotel Manhattan, Saturday evening, March 16th, the following officers were elected: President, Robert A. Murray, M.D.; Vice-President, A. R. Robinson, M.D.; Member of the Executive Committee, W. Duff Bullard, M.D.; Secretary, J. Arthur Booth, M.D.; Treasurer, William M. Leszynsky, M.D.

Smallpox in New York.—The smallpox epidemic is by no means abated. There were some 44 cases reported last week and at least 40 the week before.

The Anti-Expectoration Crusade.—MagistrateMott is doing his duty nobly in the matter of the "spitting nuisance." He has dealt rigorously with all offenders and his attitude should be warmly commended by the medical profession. The device adopted in some communities of having the conductor present a small card containing the city ordinance to every offender is worthy of imitation.

Civil Service Examinations.—An examination for physician, first and second grades, will be held April 27th, by the State and County Civil Service Examiners. Salaries, $600 per year and maintenance. Eligible list will be made up on the basis of the standings obtained by candidates in the examination for license to practise in the State of New York.

Academy of Medicine.—On Monday evening, April 8th, the Section on Surgery meets. Dr. J. P. Tuttle will read a paper on Cancer of the Rectum with a demonstration of a new method of examination. On Wednesday, April 10th, the section on Otology will meet. Dr. H. L. Swain will show specimens of Tuberculosis of the Ear; Dr. Thos. J. Harris will read a paper on Tinnitus Aurium; some remarks on its causes and treatment, and Dr. Wm. P. Brandagee will read a paper on Tympanic Vertigo, Due to Obstruction in the Eustachian Tube. The following were recommended for election to Resident Fellowship: Drs. F. Bierhoff, James B. Clemens, Alexander Duane, W. Travis Gibb, W. C. Kubin and B. F. Tilton.

Reception to Academy Fellows.—At the Academy of Medicine Friday night, April 5th, Dr. A. Jacobi gave an informal reception to the Fellows of the Academy of Medicine and friends. The occasion was a semi-centennial anniversary of Dr. Jacobi's graduation as a physician and which gave him the opportunity to meet his friends and to thank them for the many courtesies of past years. The affair was informal and very pleasant. Dr. Jacobi read a paper, mainly historical, on the

development of medicine as shown in the teachings of the early part of the century:

With that perception of underlying causes that marks the man who knows nations as well as individuals, Dr. Jacobi summarized the tendencies of medicine in the first half of the century in Europe, the sober practical method of clinical experiment in England, the revolution of medical science under Bichat in France and the sad influence of the romantic and imaginative tendency of German metaphysics that gave rise to the narrow-minded theories of medicine. Having begun his medical studies in 1847 Dr. Jacobi, possessing that perception that sees the spirit of advance, had the good fortune to watch the intellectual revolution of Germany, and to see the rise of modern scientific medicine, based on the biologic discoveries established by Virchow.

The names of the men who were the leaders of medical thought in Dr. Jacobi's student days are many of them incorporated in the terminalogy of medicine, some were the propounders of totally forgotten theories. There was Nasse, in Bonn, who thoroughly believed in animal magnetism and Ennemoser who explained the relation of Adam to Eve by that alleged force, and how to magnetize the trees in the field and the child in its mother. There was Moritz Ernst Neuman who wrote a general pathology in six big volumes, but who, Dr. Jacobi adds, "did not expect us to know it all, for he was a kind, humane man." Weber the anatomist and Bischoff who intimated to the independent young thinker who was paying his respects to him in a borrowed swallow-tail, that he unless he knew his wholly preposterous and utterly unintelligible text-book by heart he stood small chance of his diploma.

There was Conradi who believed that a "cold drink was the root of all evil," Langenbeck of whom the story is told that in the days before anesthesia when lightning speed was the characteristic of a great operator, he amputated a limb while a British guest was adjusting his spectacles to watch the operation. There were Lotze and Wagner and Kilian, all men who wrote books noted in their day.

Dr. Jacobi commented highly on a remark that Dr. Osler made a year ago, praising him for not having written anything for seven years after his graduation; but for two of those years, while shut from all communication with the outer world, he never saw a square inch of paper or more than a small pencil which he kept concealed in his hair. With his freedom he found a new freedom in medicine and "rejoiced in the fact that medicine was no longer and would never again be, the victim of a single theory, or the work of an individual man, but the results of ever so many thousands laboring in all countries and languages with the same methods for a common aim."

PHILADELPHIA.

Gift to Hahnemann Hospital.—Property adjoining Hahnemann Hospital and valued at $60,000 has been presented to that institution by Mr. and Mrs. George C. Thomas. A nurses' home will eventually be erected on the ground thus donated.

Dr. Wood Improving.—It is stated that Dr. Horatio C. Wood is gradually recovering from the attack of nervous prostration brought on by overwork which has for several months obliged him to relinquish his lectures and private practice.

Dr. Keen Honored by Jefferson.—On Thursday evening, April 4th, an oil painting of Professor W. W. Keen was presented to the Jefferson Medical College. The painting was the joint gift of the students, faculty, and alumni of the College, and the staff of the hospital. The address of presentation was made by Dr. J. Chalmers Da Costa and the painting was accepted for the College by Hon. William Potter, President of the Board of Trustees.

Arthritis Deformans Treated by Ice Applications.—Dr. M. G. Tull recently reported at the County Medical Society a case of arthritis deformans greatly improved by the application of ice to the spinal column. The patient was a female of twenty-one who had marked deformities of the wrists and could scarcely walk with the aid of crutches. A long ice-cap was applied to the spinal column for a period of two hours morning and afternoon, this time afterward being reduced to one hour. Guaiacol carbonate was the chief drug given internally. The patient is now greatly improved, the wrist deformities have disappeared and she can walk two miles. A similar use of ice resulted in marked improvement in a case of inflammatory rheumatism. A notable effect in the latter case was the causing of somnolence where before there was obstinate insomnia.

Fangotheraphy.—Dr. W. C. Hollopeter, Professor of Pedriatrics at the Medico-Chirurgical College, presented a paper on the above subject at a recent meeting of the County Medical Society. Fango is a grayish-brown mud or slime found as a sediment in certain lakes of Italy. It contains iron, magnesium, sulphur, lime, etc., and does not lose its properties by transportation. Its use is indicated in diseases of the muscles, rheumatism, gout, local neuralgias, paralysis, etc. Fango at a temperature of 98° to 120° F. is spread on the affected part to the depth of 3 cm. and the patient enveloped in warm blankets. In from one-half to one hour the fango is removed with tepid water. Several cases of rheumatism, synovitis, etc., were reported in which excellent results followed the use of this material.

Philadelphia Academy of Surgery.—The guest of honor at the meeting of April 1st was Dr. John A. Wyeth of New York who read a paper on Amputation at the Hip-Joint for Sarcoma; Its Tendency to Recurrence. Dr. Wyeth spoke of the extremely malignant character of sarcoma, pronouncing it the most malignant tumor. Statistics of operations with the per-

centages of recurrences were given. Of 267 hip-joint amputations collected 131 were for sarcoma. Not counting complications, the immediate mortailty was 6 per cent. Of the 117 who survived, satisfactory histories were obtained in 83. In these there were 51 recurrences. The effects of pyogenic infection and the induction of erysipelas were considered. From a study of his own and other cases, Dr. Wyeth concludes that streptococcic infection has an inhibitory effect on the recurrence of sarcoma, and that it should be induced. Infection should be caused at intervals of not more than six months for at least six years.

In Favor of Vaccination.—The Supreme Court, in the suit of Charles J. Field against Martha L. Robinson, principal of the Keystone Grammar School, to compel her to admit his daughter, who had been refused admittance because she was not vaccinated, sustained the decision of the lower court, April 1st, which decided that the teacher was right in excluding the girl. The court said: "We think the court below did not err in the ruling referred to in the assignments. In Duffield vs. Williamsport School districts we held that school directors, in the exercise of a sound discretion, may exclude from the public schools pupils who have not been vaccinated. Whether a resolution excluding from the school pupils who have not been vaccinated is a reasonable one is to be judged in the first instance by the school directors. In the present state of medical knowledge and of the opinion of those having charge of the public health the courts will not say that such a resolution is an abuse of official discretion. It has not been shown to our satisfaction that the act of June 18, 1895, is unconstitutional. For the reasons above stated we dismiss the assignments and sustain the conclusion of the court below." This decision should be contrasted with the decision of Judge Dunne of Chicago, as reported in last week's MEDICAL NEWS.

The Incisions in Operations for Mammary Carcinoma.—Dr. William L. Rodman, of Philadelphia, Pa., read a paper by invitation on this subject, in which he emphasized the fact that the lymph-vessels are far more numerous and complicated than former anatomists had led one to suppose. Instead of one set, as thought by Sappey and others, there are five, two superficial and three deep sets. The arrangement of these superficial and deep lymphatics explains many interesting facts in connection with cancer of the breast. It offers a ready explanation of the clinical fact that carcinomata affecting the inner half or sternal quadrant of the gland are more quickly fatal than those occupying the axillary quadrants on account of the infection of mediastinal glands. The essayist had rarely seen cancer of the inner half of the gland that was not quickly fatal, and therefore loked upon the location of the growth as an important prognostic sign. The age of the patient is also of great importance. Cancer in young patients runs a rapid course. In three cases he had seen under thirty years of age, two died within a year, the third being now under treatment with every prospect of early death. The entire gland is to be sacrificed in every case of malignant disease. He also insisted that the gland should be detached from above downward, instead of from below upward, the reverse of what is usually done. It is inconsistent to remove the gland from below upward, and clear the axilla from above downward. The incision must include all the skin covering the tumor, and should embrace that over the entire gland. More recurrences are due to leaving infected skin behind than to any other cause, due no doubt to the desire to secure primary union without skin-grafting. There is a prejudice against skin-grafting on account of the additional time required and the scars which follow it. He then reviewed the merits of some of the well-established operations. He thought the essential features of the best incision in breast operations should be, first, the wound should be sufficiently large to include all infected skin. Second, it should expose the pectoral muscles from origin to insertion. Third, should uncover axillary vessels and nerves. Fourth, it should have regard for the future usefulness of the arm. Fifth, it should, if possible, admit of primary union without the necessity for skin-grafting. Sixth, the operation should be completed within a reasonable time. While many of the above conditions are fulfilled by Halsted's, Kocher's, Senn's, Warren's and other methods, he was much impressed with the superiority of the Warren operation, and considered it a valuable step in advance, inasmuch as it enables the surgeon to secure primary union even after the removal of very large tumors without the aid af skin-grafting. The device is simple, very easily carried out, and, in the three cases in which it was tried, it was eminently satisfactory.

CHICAGO.

Additional Members of Hospital Staff.—The following appointments of physicians and surgeons to the Assistant Staff of the Cook County Hospital have been announced: Drs. F. Gregory Connell, M. L. Goodkind, Arthur M. Corwin, Carl H. Andersen, B. W. Sippy, Henry F. Lewis, William E. Quine, A. B. Spach, W. A. MacFarlane, Bernard Fantus, John Edwin Rhodes, A. F. Lemke, J. M. Weff, Arthur D. Houghton, George F. Thompson, William R. Livingstone, David J. Doherty, H. J. Brugge, P. J. H. Farrell, U. G. Wandell, and John S. Davis.

Appointment of Dr. Egan.—Dr. James A. Egan, Secretary of the State Board of Health, has been nominated and appointed a member of the State Board of Health to succeed Dr. Peter H. Wessell, of Moline.

Injury of Phrenic Nerve.—At a meeting of

the Chicago Medical Society, held March 27th, Dr. William E. Schroeder read a paper on this subject. The tumor of the neck was so situated as to make division of the left nerve necessary. The patient made an uninterrupted recovery and suffered no inconvenience from paralysis of left side of diaphragm. In referring to the various authorities it was pointed out that most of the surgeons agreed that injury to this nerve was either fatal or very dangerous, and a contrast was made with physicians who did not seem to consider paralysis, etc., of this nerve or the diaphragm necessarily fatal. In the literature were found twenty-four positive cases and one by Stromeyer of contusion of the phrenic and cervical plexus in which recovery occurred rapidly. The last one was a doubtful case. With the speaker's own case there were eight cases, his being the first case of intentional division. He pointed out that several cases of reported phrenic nerve injuries are not such injuries at all, but have either been assumed to be such or have been mistaken for injuries to the pneumogastric nerve. The following conclusions were drawn: (1) From the clinical and experimental data, it would seem that the importance of the diaphragm as a muscle of respiration has been exaggerated; (2) that as the symptoms commonly described as caused by an irritation of the phrenic were uniformly absent, not only in the operation, but in all of the experimental work as well, it is safe to infer that they may have been due to something other than a simple injury to the phrenic; (3) that while from an anatomical point of view the diaphragm undoubtedly is innervated by branches from the intercostal nerves, this nerve supply is secondary to the phrenic and is insufficient to carry on the action of the diaphragm after a division of the phrenic; (4) that a division of the phrenic nerve, producing partial collapse of the lower lobe of the lung on the affected side and an atrophy of one-half of the diaphragm, might predispose to infection of the lung or be followed by a diaphragmatic hernia; (5) that a division of one phrenic nerve in man, resulting in paralysis of one-nalf of the diaphragm only, is not necessarily fatal.

Purulent Inflammation of the Middle Ear.—Dr. Henry Gradle read a paper with this title, the object of which was to present to the general practitioner the teaching of modern otology regarding the treatment of purulent otitis, as according to the author's experience the method found to be the most efficient has not yet been generally adopted. It is possible for the family physician to prevent the serous discharge from becoming purulent, since this guarantees the most rapid and most favorable course possible. Paracentesis should be done as soon as the diagnosis is definite. Before puncturing, the meatus should be disinfected, preferably by carbolic-acid solutions. It is then packed with sterile gauze and a large pad of good, absorbing material is placed against the auricle. There should be both perfect asepsis and some guarantee against secondary infection by the liberal use of boric acid powder in the gauze. No other treatment leads to such uniform good results. The palliative use of so-called ear drops, which at the best are totally inert, can only be condemned absolutely. Regarding prevention, Gradle mentioned that the family physician should call attention to the existence of adenoids when present as a prolific source of ear disease. He likewise condemned the improper and reckless use of the nasal douche or of any of its substitutes. He thinks the danger to the ear is lessened in cases of suppurative rhinitis (in scarlet fever, measles, etc.) by a freely used indifferent spray to remove the secretion.

GENERAL.

Woman Junior Surgeon.—Miss Marion Ross, who is twenty-seven years old, has been appointed junior surgeon of the Macclesfield Infirmary. She took high honors at Glasgow University.

St. Louis Medical Society of Missouri.—Saturday, March 30, 1901, the following papers were read: Preliminary Report of a Case of Total Extirpation of the Stomach with Presentation of Specimen, by Dr. N. B. Carson; Physiological and Clinical Aspects of Dr. Carson's Case of Gastrectomy, by Dr. Jesse S. Myer.

Editor of Vratch Dead.—Dr. Wenzeslaus Manassein, Professor of Medicine at St. Petersburg and editor of the leading medical journal of Russia, has just died at the age of sixty years.

Oldest Practitioners in Austria.—According to the *British Medical Journal*, Dr. G. Ritter von Hochberger, who recently died at the age of ninety-eight years, was the oldest medical practitioner in Austria. At Carlsbad he had practised for over seventy years, having been there when Goethe was treating at that famous "cure."

Medical Society of the Missouri Valley.—The semi-annual meeting of this society was held in Omaha, March 21, 1901, under the presidency of Dr. V. L. Treynor, of Council Bluffs. After disposing of fifteen interesting papers the members repaired to the banquet. Dr. D. C. Bryant acted as toastmaster, and introduced the following speakers: Preventive Medicine and Politicians, Dr. V. L. Treynor; How We Do It in Missouri, Dr. Chas. Wood Fassett; The Physician Himself, Dr. W. O. Bridges; A Specialist's Opinion on Too Much Talking, Dr. Donald Macrae, Jr. The next (annual) meeting of the Society will be held in St. Joseph, September 19, 1901, after which the members will be tendered a complimentary outing to Eureka Springs, Arkansas.

Appendicitis Club for Maine.—Ohio is not long to have the honor of a specialty in appendicitis clubs. Maine, it is reported, is to organize one.

Plague Situation in San Francisco.—Great

pressure is being brought to bear in San Francisco to learn about the report of the Commission sent to this city by the United States Treasury Department to investigate the bubonic plague. It is said that the report, which has been forwarded to Washington, establishes the existence of plague in San Francisco, of the type prevalent in epidemics of the disease all over the world up to the climax of those epidemics. At a conference with Governor Gage, and later with Mayor Phelan of San Francisco, just before their departure for Washington, the commissioners said that they had themselves found ten cases of plague. They said the situation was serious, and that to stamp out the disease there should be a depopulation of Chinatown and the establishment of a detention camp, and that in the end it would probably be necessary to wipe out Chinatown entirely. This, it is said, forms the substance of the report made to Washington. Dr. J. H. White, Chief of the Quarantine Division of the Marine Hospital Service, says that there is no danger if proper precautions are taken, but the State authorities refuse to sanction measures suggested by the quarantine officers and the Plague Commission, which the city authorities desire to take. There have been thirty-two verified cases of plague since March 8, 1900, three of them whites, including a white nurse. Several of the cases have been of the pneumonic and most highly contagious type. There are at least five cases not in the verified list of undoubted plague, one of them a white. The latest verified case was on February 24th. There is one case, a negro, now under examination. The statement of the plague situation given out at Washington by the delegation which Governor Gage sent there does not accord with the facts as they are known to persons not tied up to the policy of suppressing the truth for the sake of commercial advantage. Governor Gage denies there has ever been a case of bubonic plague in San Francisco and asserts that the reports are instigated by a conspiracy to rob the State of prestige in order that Northern Pacific interests may secure Oriental and transport trade.

An explicit statement giving the exact conditions regarding bubonic plague in San Francisco has been prepared for the Official Public Health Bulletin. A table is given showing that there were ten deaths from bubonic plague in San Francisco between January 1st and March 15th. Of the cases, those reported in February, six cases and deaths between February 5th and 12th were reported by a special commission appointed by the Secretary of the Treasury to examine into the plague situation in San Francisco. This commission consisted of Prof. Simon Flexner, of the University of Pennsylvania, Chairman; Prof. F. G. Novy, of the University of Michigan, and Prof. L. S. Barker, of the University of Chicago, Recorder. Plague has been reported in San Francisco officially in the public health reports since March 6, 1900, thirty-two cases (all fatal) having been reported and published in previous numbers of the public health reports, and the facts were reported in the annual report to Congress of the Secretary of the Treasury, dated Dec. 4, 1900. On the return of this committee to San Francisco, Surgeon White wired, on March 22d, that they had agreed to raise funds for immediate work as follows: Disinfect all infected houses, provide hospitals for suspects, detention houses and morgue; the general disinfection of Chinatown, with betterment of light and air space. Subsequent telegrams show that the work is being organized. The disease has been confined almost exclusively to the Chinese and an examination of the mortuary records of the latter for the past four years shows that there has been no time during that period when it has increased to such an extent as to, in itself, cause alarm.

Obituary.—Dr. Edward B. Lighthill died suddenly at his home in Newark on Monday afternoon. He was born in Würtemberg, Germany, and was graduated from the medical department of Frederick William Hospital. He formerly practised in Newark and while a resident of that city married Miss Illinois Sherman, a relative of Gen. William T. Sherman.

Medical Director William T. Hord of the Navy died in Washington April 1st. He held the relative rank of Captain on the retired list His naval service covered a period of nearly forty years. He was born in Kentucky and was about seventy years old. He was a volunteer aide on the staff of General Nelson from the battle of Pittsburg Landing to the evacuation of Corinth, Miss., by General Beauregard. On the steam sloop "Pawnee" he participated in all the operations against Charleston under Admirals Dupont and Dahlgren and General Gilmore. He was commissioned Medical Director May 1, 1879, and was retired on account of age in 1893.

Dr. William Fleet Luckett, a prominent physician of Washington, died at his home in that city yesterday at the age of sixty-three years. He was born in Loudoun county, Virginia, was graduated from the University of Louisville in 1860, and served throughout the Civil War as a surgeon in the Confederate Army.

Dr. James H. Rogers of East Hampton, Long Island, died March 12th at the Grand Union Hotel, New York. He had just recovered from a Bottini operation when he was stricken with lobar pneumonia and died on the fourth day. He was born in New York, September 1, 1829; graduated from Williams College in 1852, and from Jefferson Medical College in Philadelphia four years later. He then went abroad where he pursued his medical studies for two years in Paris. He then located in New York until the outbreak of the Civil War when he became a Surgeon to the 7th Regiment of New York Volunteers, and had medical and surgical charge of Fort McHenry for a time. In 1865 he located in Sag Harbor, Long Island, and the next year was mar-

ried to Miss Georgia E. Starr of that place, who survives him. In 1894 he retired from active practice and located in East Hampton. His father, Nathan Rogers of New York, was one of the foremost miniature portrait painters of his day, and was one of the founders of the Academy of Design. Dr. Rogers was small of stature and frail of constitution; however, his intellectual attainments were of a high order, and he was positive and resolute in his conclusions. He continued active in the recent advances in medicine to the very last. He had been a most painstaking observer, which, with his wide attainments, made him a most valued consultant. Of him, it can be truthfully said, "He was a gentleman of the Old School."

American Academy of Medicine.—The twenty-sixth annual meeting of this society will be held at the Hotel Aberdeen, St. Paul, Minn., on Saturday, June 1, 1901, at 11 A.M. (Executive session); the open session beginning at 12 M. and continuing through Monday, June 3d. The principal features of the meeting will be a symposium on "Institutionalism"; and another on "Reciprocity in Medical Licensure." Series of valuable papers on both topics have been promised, as well as interesting papers on some other subjects. The President's address (Dr. S. D. Risley, of Philadelphia) will be delivered on Saturday evening, June 1st, and the Annual Social Session held on Monday evening, June 3d.

CORRESPONDENCE.

AN ANTAPHRODISIAC OF SOME MERIT.

To the Editor of the MEDICAL NEWS:

DEAR SIR: During the past year I have used the following prescription in my practice in a number of cases. It was prepared to stimulate the hepatic secretion, to improve the condition of the kidneys, and to strengthen the nervous system. Somewhat to my surprise, I noticed in some of my first cases a marked abatement of previously strong sexual proclivities. I continued using it in my practice, and found it to restrain the venereal appetite in both sexes to a marked degree. Judging from reports of the difficulty of solving the social evil problem, there is much need of reliable and energetic antaphrodisiacs. No bad effects following the use of the remedy in my cases have been noted. There is simply a subsidence of desire, while all the physical functions are performed as usual. Believing that there is an excellent opportunity for testing the virtues of the combination on a large scale, it has appeared to me proper to offer it as a small contribution in aid of a worthy cause. Hoping that it may be a seed planted in good soil, and that it may produce a hundred fold, it is here given:

℞ Tinct. cubebs.....3ss
Kola cordial, P. D. & Co.....3i
Fl. Ext. wahoo.....3iii
Syr. simpl. ad.....ʒiv
Misc. Sig. One teaspoonful in water fifteen minutes before meals and at bedtime.

JOHN I. LIGGET, M.D.

Ladiesburg, Md., March 7, 1901.

OUR LONDON LETTER.

[From Our Special Correspondent.]

LONDON, March 25, 1901.

DEATH OF QUEEN VICTORIA'S DENTIST—COURT MEDICAL APPOINTMENTS—THE LATE QUEEN'S FAVORITE PHYSICIAN—DECORATIONS FOR DOCTORS—PROFESSIONAL EARNINGS—RECIPROCITY OF MEDICAL PRACTICE BETWEEN GREAT BRITAIN AND ITALY—THE INTERNATIONAL CONGRESS ON TUBERCULOSIS.

QUEEN VICTORIA has been quickly followed to the grave by her dentist Sir Edwin Saunders. He was the first English Knight who ever won his spurs by his prowess with the dental forceps. If he had not the ear of the Queen, he at any rate had her jaw, for he had official charge of the royal teeth for more than half a century. But as he was several years older than his august patient, his post was for a considerable time before her death almost purely honorary. Another dentist whom the Queen consulted in her later years found her a distinctly refractory patient. Her Majesty at first peremptorily declined to follow his advice, and six months afterward sent for him, indicated it to be her will and pleasure to have the line of treatment carried out to which she had previously refused to submit, and found fault with him for not having recommended it.

It is considered in our snobocratic old Europe a high honor to have medical charge of the person of the sovereign, but it is an honor which it needs a certain suppleness of spine to carry with comfort. If it be true that "uneasy lies the head that wears a crown," it may also be said that uneasy stands (for etiquette forbids his sitting) the physician who has the care of that head. He knows that his reputation is at stake, for if things go wrong he will be held accountable, and he will ever after be like Othello, "a fixed figure for the time of scorn to point his slow unmoving finger at." The death of Napoleon the Little has always been attributed by the public to the blundering of his doctors, and in his recent book on Napoleon the Great, Lord Rosebery speaks contemptuously of the banished Emperor's medical attendants, for no better reason apparently than because they failed to cope successfully with cancer of the stomach.

On the other hand, if a physician or surgeon gets the credit of having cured any ailment from a cancer to a cold in the person of roy-

alty, he tastes how sweet are the uses of advertisement. What is called "Society" here is very like what it was in France in the days of Louis XIV., when Felix, the surgeon who operated on the royal fistula, was overwhelmed by courtiers clamoring for a touch of the knife which had been plunged into the rectum of the Lord's anointed. A doctor who is known to attend royalty wears around his head, in the eyes of the loyal Britons, a halo of light reflected from the central luminary of our social system. *S'il n'est pas la rose, il a vécu près d'elle.* A story used to be told of a Court doctor, who has long since gone to that unprospected country where kings and costers mingle their dust, which illustrates at once the innate flunkeyism of so-called "smart" people in England, and the profitable uses to which this amiable weakness may be put by a shrewd practitioner. He had on the mantelpiece of his consulting room a bottle full of a liquid which he exhibited from time to time to privileged persons as the renal secretion of a beautiful Princess, who has now reached a more exalted position. The faithful paid cult to this interesting relic with as touching a devotion as any pilgrim in the ages of faith ever brought to the holiest shrine; their offerings enriched the priest of science who guarded the sacred spring, and his fame was in the mouths of all who formed part, or wished to be considered as forming part of, the world of fashion.

Of course, all Court physicians are not men of this stamp. Sir William Jenner never stooped to servility and spoke his mind with a bluntness which did not always please ears attuned to tones of deference and flattery. When Lord Beaconsfield, who was a special favorite of the late Queen, was stricken with the illness which proved fatal, Her Majesty asked Jenner to visit the dying statesman. "Dizzy," who like many politicians, at any rate in Europe, had a poor opinion of doctors in general, had given his health into the keeping of a physician who had practised homeopathy and still, rightly or wrongly, lay under suspicion of that heresy. Jenner refused to meet him. The Queen insisted, and Jenner at last said "I am your Majesty's servant and I am bound to obey your command. But I must ask to be forthwith relieved from a position in which I am liable to have such a command laid upon me." The Queen was not accustomed to have her will opposed, but in the face of this firm attitude of her trusted physician, she thought it well to give way. Jenner then offered to visit Lord Beaconsfield on condition that he was not to be expected to acknowledge the unorthodox practitioner. It is related that in order to make it plain that he would have no dealing with heresy, he carefully kept his back turned towards his "separated brother" all the time he was in Lord Beaconsfield's room. Jenner's salary as Physician to the Queen was understood to be $20,000. Of course the appointment was worth much more to him as an advertisement. But the duties were very onerous, and a good many years before his final abandonment of practice he would have been glad to give up his attendance at Court; he did not care to do this, however, partly out of personal regard for the Queen, but mainly because it would have involved his retirement from active professional life, a step which he could not afford to take.

The position of physician in ordinary to the sovereign has generally been held by a man who has gained a leading place in the profession in the arduous path of hospital work and teaching. It is in fact regarded as one of the chief prizes for a profession in which prizes are few. Sir James Clark, however, Queen Victoria's first physician, in whose hands she was for the first twenty years of her reign, was originally a surgeon in the navy and was never a hospital physician. Nevertheless the royal family had unbounded confidence in him, and he fully justified the trust, though in the early days of his connection with the Court he fell into an error of judgment which had very painful consequences. Sir. James Reid, again, who succeeded Jenner has never been a consulting physician in the ordinary sense. For some years he was resident physician with the Court, a position in which he succeeded a Dr. Marshall who held it for twelve years. During all that time Marshall hardly ever saw the Queen, except at a distance and he had but one brief holiday. Short as it was it was interrupted by a summons to Baveno where John Brown, the Queen's personal attendant, had been taken ill with some trivial ailment. Although an eminent physician, the late Dr. Wilson Fox, was in attendance, Brown insisted on having Dr. Marshall sent for, and the wish of so important a personage had to be obeyed. When Marshall resigned his post, there were naturally a great many candidates for the vacancy. To these aspiring youths Jenner, with characteristic plainness of language, explained the precise position which the resident physician had to occupy and the duties which he had to perform. This had the effect of checking their vaulting ambition, and for a time it was difficult to find any one to accept the post. One man was induced to act as a stop-gap and gave such satisfaction that he was urged to stay on. After three months, however, he could stand it no longer, and he has since been heard to say that he would not have taken the permanent post for $50,000 a year. The duties were light enough, being little more than prescribing an occasional nerve sedative for a Maid of Honor or an aperient draught for a "dresser," as the Queen's tiring women are called. The resident physician was never allowed to try his prentice hand on the sacred person of "Her Most Gracious." The life was lonely and

dull; the unhappy man was cribbed, cabined and confined in the iron cage of etiquette. He could not leave the house till the Queen went out for her daily airing; he could not smoke except at certain times and in certain places, as the royal nose was offended by the fumes of tobacco; he had no one to speak to, except the lower officers of the Royal Household who looked down upon him as a being of commoner clay; he had no convenience for study and little opportunity of practice, with the result that he was in danger of forgetting whatever professional knowledge he had acquired. A position more intolerable to a man of any spirit could hardly be imagined. And against these manifold disadvantages there was not even the consideration of a good salary to be placed. Court appointments are in general poorly paid, as the honor of serving royalty is regarded as in itself a reward for the most self-sacrificing devotion.

Sir James Reid's Court career has been very different from that of his predecessor. He has, indeed, been the spoilt child of fortune. He won the Queen's confidence not only as a physician but as a counsellor in her very extensive and complicated family affairs. With an industry which can only be described as heroic he mastered the family tree of the Guelphs with its innumerable ramifications through an infinite series of relationship and affinity to the *nth* German cousin. Her Majesty valued his advice because he always said just what he thought. But the burden was sometimes almost more than he could bear. One day at Cimiez he begged one of the local physicians to invite him to go out for a drive, as he had had to listen for four hours to some more than ordinarily tangled web of family trouble, and, in accordance with etiquette, had been standing all the time. It is no secret that ladies in waiting sometimes fainted after standing for hours in the presence of royalty, and even strong men broke down in health under the exacting duties of attendance on the person of the Sovereign.

Though Sir James Reid has contributed practically nothing to medical literature, and owing to circumstances has had relatively little experience, such is the divinity that doth hedge a throne that if he chose to put his name on a brass plate in a fashionable quarter, his door would be besieged by patients. It is said, however, that he intends to be content with a quieter, if less lucrative, mode of life; and this decision is probably a wise one.

The King has conferred on Sir Thomas Barlow and Sir Richard Douglas Powell, who, with Sir James Reid, were in attendance on the Queen in her last illness, the Kinghthood of the New Victorian Order. Edward VII. has not yet chosen his own Medical Establishment, but it is perhaps significant that he has within the last few days bestowed the same Order on Sir William Broadbent, his Physician in Ordinary when he was Prince of Wales. Sir William Broadbent has probably the most remunerative practice of any pure physician in England.

It may be mentioned that $50,000 is about the high water mark of professional income for pure physicians here. Some operating surgeons, especially those who have taken the abdomen for their province, earn a good deal more. Their fees are high and they often add to their strictly professional gains an unearned increment derived from "nursing homes" to which they send their patients. The charges at some of these homes are very high and the surgeon who plays the part of tutelary genius is believed to take the lion's share of the profits.

From an official announcement made in the *London Gazette* of March 19th it appears that the Privy Council has administered a snub to the General Medical Council, which is the body having most direct power over the medical profession in this country. As you are aware, the cry of "Italy for the Italians" was raised some time ago by the medical profession in the dominions of King Victor Emmanuel II. This fluttered the dovecotes of the British practitioners who minister to the medical needs of their countrymen in Italy. There has been a good deal of negotiation and wire pulling, and the matter would doubtless have been amicably settled by diplomatic action. But our Medical Council took a *Non possumus* attitude in regard to the recognition of foreign diplomas, and the Italians were equally determined not to recognize the diplomas of any country which refused to recognize theirs. It seemed therefore as if what has hitherto been an "open door" would be slammed in the face of the British physician in search of an Italian market. The difficulty has now been got over by the Order in Council by which full reciprocity of recognition of medical diplomas is granted to Italy.

The organization of the International Congress on Tuberculosis which is to be held in London this summer is proving to be a task of unexpected difficulty. It had been arranged that the Prince of Wales should open it in state. As a French monarch said, however, that the King of France did not remember the wrongs of the Dauphin, our new King does not acknowledge this particular engagement of the Prince of Wales. He sent a curt intimation to that effect to the organizers of the Congress when they humbly ventured to remind him of his promise, and they are now trying to secure one of the *minora sidera* of royalty to grace their meeting.

Physician Stabbed by Hospital Patient.—Dr. Johnson, a physician in the State Hospital for the Insane at Danville, Montour County, was stabbed to death to-night by an insane Italian patient.

TRANSACTIONS OF FOREIGN SOCIETIES.

German.

SPINAL TUMORS—PYRAMIDAL TRACT FUNCTIONS—RARE RENAL TUMOR—VEGETARIANISM—TUBERCULOUS ANURIA — TWENTIETH ANNIVERSARY OF THE FOUNDING OF THE VEREIN FUER INNERE MEDICIN IN BERLIN—HYPERTROPHY OF THE PROSTATE—BONE SUTURE.

F. Krause, at the Berliner med. Gesellschaft, February 13, 1901, in presenting a case of tumor of the spinal cord cured by operation and in discussing this subject, observed that since the suggestion and introduction of the operative removal of these growths by Horseley thirty-seven instances have been reported of which thirteen were fatal. The later series of cases have been more successful than the earlier, for two reasons; first, very great improvement in the operative technic and, second, earlier and more accurate diagnosis of the neoplasms by the attending physicians. The thirteen fatalities above are such as are undoubtedly attributable to the operation itself. His seventy-six-year-old patient had been weak in the right lower extremity for five years following a traumatism, namely falling down a flight of stone stairs and repeatedly striking her back on the edges of the steps. Just after the accident she was not bedridden but experienced much lumbar pain. The speaker could find no evidences of gross lesion. Eight or ten weeks after the fall she began to have pains, paresthesias and paresis in both lower extremities, at first about the right thigh, later about the left. In May, 1897, girdle-sensation appeared and her state as a whole become worse. By May, 1900, her right lower extremity had become entirely lame. At this time on examination were found on the right side paralysis, girdle-sense and disturbed sensation, normal well-nourished muscles, normal tendon reflexes, normal electrical reaction. On the left side the extremity was entirely anesthetic and decrease in the temperature sense. Muscular sense was bilaterally normal. The picture was therefore that of a Brown-Séquard unilateral paralysis with a few alterations. The diagnosis made was that of tumor of the spinal cord. Its site was assumed to be intradural, because there was no tenderness to pressure or percussion along the vertebral column, and from the symptoms, at the ninth dorsal segment, between the seventh and eight dorsal spines. These were exposed freely through the soft parts and the arches of the seventh and eighth dorsal vertebræ were removed. Beneath them lay the dura very much distended. This was incised and a walnut-sized discrete tumor easily shelled out, leaving a slight depression in the cord. The operation lasted a few minutes. Recovery was prompt. Restitution, though not complete, was certainly far better than the dismal remote effects of the tumor if left *in situ*. Psammoma of benign character was the type of the growth.

M. Rothmann in a paper on the functions of the pyramidal tracts said that it had been thought that these had been separated from the others, but in later observations it was proved that this idea is erroneous. Of course, all observations and experiments have to be made upon animals and naturally in the development of the spinal cord in man and in the lower orders is different. The recent experiments of Starlinger, Schiff, the writer and others, have shown that in dogs and apes when these tracts are cut through the resulting paralysis is temporary, the muscles recovering their power in part or whole. The explanation appears to be that the centrifugal impulses pass down the tract of Monakow which crosses as a rule just above the pyramids and in the cord passes down just beside their path. Hence after a while these paths take up the function of those destroyed and more or less use returns to the extremities. Such is also the probable explanation of some of the recoveries after hemorrhage into internal capsule in man.

Schoenstadt, at the meeting on February 20th, showed an adenocarcinoma, removed from a child a few months old, who had developed it within one kidney. Such was pronounced very rare.

Alber discussed the possibility of a rigidly pure vegetarian diet and the relation it bore to perfect health. The vegetarians have long claimed that such is not only possible, but often the case among them. Only two well-proved, reliable cases of a faithful vegetarian diet are reported, however, one by Voit and another by Rumpf, jun. The writer begged to note a third. His patient was an exceedingly graceful, healthy female thirty-six years old, who for several years had eaten only vegetables. She allowed herself a five-day varied menu from which she made choice. This total comprised 120 grams of graham bread, 400 grams of apples, 200 grams of grapes, 460 grams of hazelnuts, 70 grams of dates, 100 grams salads, together about 1400 grams or 3713 grams per kilogram of body-weight. The percentage of nitrogen was 5.4+grams = 34.1 grams of egg albumin, fat in the nuts was 36 grams, carbohydrates, 225 grams. The quantity of urine was very small indeed; fecal matter abundant. With this very small quantity of food and extraordinarily limited amount of nitrogen, the patient still remained in good health and apparently suffered nothing from the scanty nitrogenous supply. If we admit the possibility of such a purely vegetarian diet as generally safe, it does on the whole and general rule appear to be not conformable to good judgment. There are however certain contra-indications and direct indications for it in therapeusis. It will be very serviceable in urticaria, pruritus, furunculosis, erythema ex-

udativa, multiformis and nervous, some disturbances of gastric indigestion, fatty tendencies, and neurasthenia. It will be inadvisable in many organic gastro-enteric diseases, as is self-evident to any observer.

The Verein für innere Medicin in Berlin celebrated the twentieth anniversary of its foundation on February 20th by a special meeting and on the 21st by a banquet. At the meeting Von Leyden was the recipient of the highest honors in the gift of the society in the office of Honorary President, presented by Gerhardt in a speech reviewing his services during the difficulties of founding the organization. Rothmann read a short list of newly elected honorary members. Von Leyden gave a history of the society since the first meeting and Litten, the Secretary, read an epitome of some of its most important transactions.

PELS-LEUSDEN, at the Gesellschaft der Charité-Aerzte in Berlin, February 7, 1901, gave the history of a case of anuria in a female with a palpable tuberculous tumefaction of the right kidney. After three days of an active pneumonia, and notwithstanding it, the kidney was exposed and a large quantity of urine evacuated from the parenchyma and pelvis of the organ. Through a drainage-tube for several days urine continued to ooze. Finally, the bladder again began to discharge urine and the fistula soon healed. The explanation of this phenomena appears to be that the pelvis of the still secreting left kidney became blocked in some manner, perhaps by a clot, for example.

BRAUN, in a critical review of the various methods of treating prostatic hypertrophies, dwelt at length on procedures employed at König's clinic. This is simply the use of a large common metal catheter as a preventive of urinary retention. As a rule this is found to work well and produce a practical cure of long duration.

MARTENS stated that in the same clinic all recent fractures of the patella are now sutured, so also those of the olecranon process when apposition of the fragments by other means promises to fail. In fractures of the jaw, the patient is first turned over to the dentist and when he fails, the bone suture is tried. Other fractures complicated and uncomplicated usually do well under the old-style methods.

SOCIETY PROCEEDINGS.

HARVARD MEDICAL SOCIETY OF NEW YORK CITY.

Stated Meeting, Held Saturday, February 23, 1901.

The President, Howard Lilienthal, M.D., in the Chair.

Acute Contagious Conjunctivitis.—The paper of the evening was read by Dr. Edwin S. Steese on the common acute contagious conjunctivitis known familiarly as "pinkeye." This disease has taken on special interest of recent years because of its frequent occurrence in epidemic form in our large cities. In 1885 Dr. Weeks of New York began an investigation as to the etiology of the disease. The result of his studies was not announced until 1895. Every year, especially in the spring and fall, there were scattered epidemics of this form of conjunctivitis, which came to be known popularly as pinkeye. First one, then other members of a family were attacked by the disease, and its spread in schools showed that it was contagious. The English troops returning from Egypt brought the disease with them. Koch in his series of investigations in Egypt discovered that Egyptian conjunctivitis was due at times to the gonococcus and at other times to a slender bacillus, morphologically not unlike the micro-organism which causes mouse septicemia. English ophthalmologists at first were rather alarmed as to the importation of the disease into England, but it proved to be comparatively harmless and had none of the characteristics of the chronic conjunctivitis which exists in Egypt so commonly and which is so often obstinate to treatment.

Etiology.—Dr. Weeks of New York without knowing anything of Koch's researches found a bacillus resembling that described by the German observer. After obtaining this bacillus in a pure culture, Weeks inoculated it into the eyes of rabbits but without results. It was then tried on human beings and an acute conjunctivitis always resulted. The bacillus as described by Dr. Weeks is thinner and longer than the tubercle bacillus. When obtained from human secretions the characteristic bacilli are always distinctly separated from one another and their limits are well defined. When grown on culture media, the bacillus always grows in strings and the individual bacilli are not well defined.

Contagiousness of the Disease.—The disease is contagious so long as bacilli are present in the secretion and this is always for some time after the disappearance of the acute symptoms. There remains a stage of convalescence during which the disease is communicable to others. This accounts for the spread of the disease in epidemic form. As a rule the bacilli are found free in the secretions, but at times they occur in the cells of the secretions, in this resembling the gonococcus. Morax in France placed a drop of pure culture in the cul-de-sac of his conjunctiva at a time when absolutely no lesion of the conjunctival membrane was present. Conjunctivitis resulted.

Symptoms.—The first symptom is a congestion of the eyeball. Both sets of ocular blood-vessels, the internal and the external, are congested. At the beginning of the disease, many leucocytes are present in the tissues. At times congestion produces such a redness of the conjunctiva that the disease is sometimes spoken of as acute hemorrhagic conjunctivitis. Lacrima-

tion usually continues for three or four days, then muco-pus occurs on the conjunctiva and there is some gluing of the lids in the early morning hours, then the characteristic pink color, to which the disease owes its name of pinkeye, develops. At times the secretion is distinctly purulent. This may give rise to mistakes of diagnosis and a suspicion of the presence of gonorrheic ophthalmia may develop. There is slight chemosis, that is, edema between the conjunctiva and sclera; at times some constitutional symptoms, slight fever and headache being observed. Yellow masses are often found at the inner canthus of the eye and are characteristic of the disease. As a rule, the disease takes three weeks before it is entirely well and it may remain contagious even after this period.

Complications.—Certain cases of acute contagious conjunctivitis are complicated by phlyctenula or trachoma. Other complications are always due to secondary infections. The phlyctenula or trachoma may have existed before the conjunctivitis developed and then be somewhat exaggerated by the acute process. Corneal ulcer occurs very rarely in the disease. In 2,000 cases of the disease Weeks has seen corneal ulcer only once. Morax in France has seen six corneal ulcers. Still it is necessary to be on one's guard against the development of ulcer, though it is a rare complication. In a certain number of the cases where corneal ulcers were reported as occurring during the course of pinkeye, the corneal complication was undoubtedly due to the fact that it was not the Koch-Weeks bacillus, but some other micro-organism that was the causative agent in the production of the acute inflammation. The physician must be constantly on his guard not to mistake other and more serious conjunctival inflammations for pinkeye at a time when he knows that pinkeye is prevalent.

Treatment.—As soon as pinkeye is suspected, the patient should be isolated. To relieve the discomfort that occurs cold applications are the most soothing. In delicate children, particularly when cold applications are continued for a long time, care must be taken that the circulation to the cornea does not become so sluggish as to interfere with the nutrition of this important structure. At the slightest appearance of a hazy cornea cold applications should cease. The use of simple cold compresses is better than any antiseptic. The method of applying cold is to place small squares of linen on ice until they become ice cold and then apply them over the eyelids. The pieces of linen may be changed by the patient himself, whenever they become warm, that is every five minutes or so. During the acute stage of the disease, the eyes should be washed every half-hour with a two- to three-percent. solution of boric acid or a very dilute solution of bichloride of mercury. It seems almost impossible to keep the other eye from being affected when one has become diseased. The ordinary eye-shields are apt to do more harm than good, and their use in acute conjunctivitis is not approved by any of the authorities.

Protection and Immunity.—The disease affords no protection against itself and provides no immunity. Within a few weeks after an attack there may be a recurrence. The patient does not, however, seem to reinfect himself. After the acute stage is passed a solution of silver nitrate, one to one and a half per cent., may be used. This often seems to hasten convalescence. Where puffiness of the lids occurs and the case seems prone to run a chronic course, the silver-nitrate treatment is especially useful. The infectious agent apparently does not invade the lacrimal glands. Where the lacrimal glands are invaded, or where the ducts become infected, some secondary microbic agent is at work. This is usually the pneumococcus, but may be the streptococcus. When the latter agent obtains a firm hold serious purulent complications may ensue. Pinkeye in human beings is seldom accompanied by coryza, though ths is a very common symptom of a similar disease in horses. In ordering cold applications for the eye it is important to direct exactly how they should be made. The use of the little squares of linen that have been described, put on ice for five minutes or more and then applied to the eye, is the best method. Where specific directions are not given attendants may apply cold by means of a piece of ice wrapped in a handkerchief or a linen towel. The addition of pressure to the cold is nearly always a source of danger. The circulation is interfered with, the nutrition of ocular tissues is lowered, haziness of the cornea results and before long there is danger of perforation.

Ether Conjunctivitis.—Dr. John B. Walker said in the discussion that in a recent case in one of the hospitals, rather painful conjunctivitis developed as the result of the instillation of some ether into the eye, through carelessness on the part of the anesthetist. Cold applications were made to allay the pain. At the end of thirty-six hours, however, the patient instead of being more comfortable was suffering rather severely. The pain seemed actually to be increased. An ophthalmologist was called in consultation and he recommended the application of heat. He said that it was not an unusual thing to find that in certain patients cold rather increased the discomfort, while heat relieved it. In twelve hours the patient was at ease.

Differential Diagnosis.—Dr. Howard Lilienthal said that during an epidemic of acute contagious conjunctivitis every disease of the eye should not at once be diagnosed as pinkeye. There is danger that a gonorrheal conjunctivitis may be allowed to run its course without proper treatment for several days as the result of such a false diagnosis. The consequences of such an error would almost surely be serious for the patient. Microscopic diagnosis should be made in

every case, especially if any unusually severe symptoms are manifest. Dr. Lilienthal has seen haziness of the cornea develop as the result of the application of cold. He has had favorable experience with the method of applying folds of lint, but considered it a mistake ever to use more than four folds for an application, for when more are used they are apt to adhere to the lids.

Heat or Cold Applications.—In a recent case where a corneal abrasion resulted from a careless anesthetist's fingernail rather severe conjunctivitis developed. In this, as in Dr. Walker's case, while cold did no good, heat relieved the pain very soon. The cold that is applied is, of course, not enough to kill bacteria, but it may be sufficient to retard their growth and make the inflammation less severe. In a personal experience with pinkeye Dr. Lilienthal made applications of cocaine to the conjunctiva. These applications were continued until the conjunctiva was almost whitened. Not only was the discomfort lessened, but the disease seemed to run a shorter course.

Prophylaxis.—Dr. Henry Coggeshall said that in the first epidemic of the disease which he saw, it spread not only among the patients in the hospital, but also among the doctors, the nurses and the attendants. Only those members of the hospital staff escaped who were trained to keep their fingers out of their eyes. The disease runs in epidemic form usually during dusty seasons of the year. When the disease is known to be epidemic children particularly should be taught to wash their hands very thoroughly and frequently during the day and to rub their eyes as little as possible.

In closing the discussion Dr. Steese said that it is extremely difficult to protect the other eye from infection, though patients should be cautioned to guard it as far as possible. The use of a cover-glass as a rule is not advised. In a case of conjunctivitis where both surfaces of the conjunctiva are inflamed, heat is a better remedy than cold. There are two reasons for the use of cold applications to the eye. The one is the comfort of the patient and for this the choice of heat or cold depends somewhat upon the idiosyncrasy of the patient. The other reason is to limit the growth of bacteria by making the temperature of the ocular tissues unfavorable for them. It is much easier to lower the temperature of the tissues to a point where bacterial growth is retarded than to raise it sufficiently to produce a similar effect. Hence the more frequent use of cold.

Influenza and Typhoid.—Dr. Charles Schramm reported a case and exhibited a set of charts which showed influenza and typhoid running their course side by side in the same patient. The patient was first taken down with characteristic influenza symptoms of the catarrhal type. In a week the symptoms were better, but the pericardial complications developed and the second heart-sound reduplicated. The temperature continued high and the patient became alternately restless and apathetic. The temperature rose to 107° F. and some consolidation was discovered in the upper part of the lower lobe of the right lung. Recurrent chills developed with a temperature of 105° and 106° F. This was evidently the bronchopneumonic phase of influenza sequelæ. Spots of consolidation formed here and there in the lungs, but disappeared in thirty-six hours. During the course of the typhoid fever an alarming hemorrhage came on. The nurse became confused and a heavy ice-bag was applied directly to the skin and allowed to remain for some time. As the result of this an eschar developed in the right inguinal region with loss of the cutaneous tissues. The resultant sore took a long time to heal. After three weeks of characteristic typhoid, lysis of the fever took place and everything was going on well, when a relapse occurred. This secondary typhoid was complicated by hemorrhage and by a septic condition. Notwithstanding this alarming series of accidents the patient is recovering.

Unusual Typhoid Accompaniments.—Dr. Howard Lilienthal said that he had recently operated on a case in which a medical man said that typhoid was beginning. There was a history that pointed to the existence of cholecystitis. He operated and removed an amount of pus from the gall-bladder and a number of stones. The patient recovered without incident, but the typhoid fever ran its course without any interruption. Dr. Lilienthal has seen superficial sloughing occur from the injudicious use of ice-bags. The possibility of this does not seem to occur to most people. Special care is to be taken in this matter in stout patients. The nutrition of the fat tissue of the abdomen is low in resistive vitality and an almost gangrenous condition develops on very slight provocation.

Dr. Walker said that he has seen some cases in which ice-bags used too freely on stout patients have produced sloughing. In one case of a very stout person a slough eight inches in diameter occurred, which proved extremely obstinate to treatment. If used without discretion ice-bags may cause a cutaneous condition much worse than the internal condition for which they are employed.

Dr. Schramm said that the direct application of an ice-bag without the interposition of cloth is usually responsible for the development of cutaneous sloughing. In his case this was undoubtedly the cause. Heavy ice-bags, however, should be avoided, especially in stout people. If there is question of an operation to be performed later on in the course of the case, as for example in appendicitis, then special care must be taken that the resistive vitality of the tissues, through which the operative incision must be made, is not too much lowered by the application of an ice-bag.

Gelatin for Hemorrhage.—Dr. Schramm said that in his case of typhoid fever when the

hemorrhage seemed serious, the patient was put on an exclusively gelatin diet. Before the occurrence of the hemorrhage there had been some uneasiness, some additional abdominal tenderness and some depression. If the preliminary symptoms of a hemorrhage could be recognized with any reasonable certainty it is possible that the use of gelatin as an exclusive article of diet might either prevent the occurrence of a hemorrhage or lessen its intensity very considerably. Gelatin used in this way as an internal hemostatic has not been tried sufficiently to enable us to say with certainty whether it does good or not. We are so helpless, however, in the presence of severe intestinal hemorrhage that it seems well worth the while to try this means as effectually as possible.

Injections of Gelatin.—Dr. Lilienthal said that injections of gelatin into the circulation seemed undoubtedly to produce greater coagulability of the blood. This had been demonstrated experimentally on animals and also in the treatment of aneurism in human beings. The question of injections of gelatin for hemorrhage from a typhoid ulcer has not as yet been considered. It seems well to remember, however, that we have such a means at our command in these often alarming cases and to make use of it when occasion requires until we learn whether it is efficacious or not.

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, Held March 7, 1901.

The Vice-President, Charles L. Dana, M.D., in the Chair.

The scientific business of the evening consisted of a discussion on alcoholism, its etiology, pathology, therapeutics and legal regulation.

Statistics of Alcoholism.—In the absence of Professor Chittenden of Yale University Medical School, the discussion was opened by Dr. Charles L. Dana who gave the details of his personal experience with alcoholic patients. Of those who form the alcoholic habit, or become the victims of the disease of inebriety two-thirds of the patients contract the habit before they are twenty years of age. Practically all of those who become inebriates show marked symptoms of their condition before they are thirty. It a man has been abstinent until thirty, there is very little danger of his contracting the alcoholic habit afterwards unless some special condition develops to modify his will power and alter his constitutional habit.

Neurotic Basis.—The most prominent factor in the production of inebriety is very evidently a family heredity of neurotic character. Neurasthenia is one of the prominent traits of all periodical drunkards. This neurasthenia is sometimes due to the alcoholism. It is always increased by the alcoholism. Under ordinary circumstances a drunkard will live about twenty years after his habit of drinking to excess occasionally has been established. The sot, or chronic inebriate, who is nearly always besotted with alcohol will live fifteen years or less. Death is usually due to some complication and not to the habit itself. Pneumonia, meningitis, or delirium tremens ends the scene. These affections, of course, often carry off a patient long before the term of fifteen or twenty years is past.

Number of Drunks.—An interesting consideration is how many times the human system will stand being drunk. In a recent case under Dr. Dana's care the man confessed that he had been drunk about twice a day for three years. This would make about 2,000 drunks. From his condition it might be judged that he would live for another year and that his limit would be about 3,000. A consideration of a number of other cases seems to show that 3,000 intoxications represent about the maximum number that the human organism will stand.

Types of Intoxicants.—In about one-third of the cases inebriates seem to become intoxicated on spirituous liquor alone. In about one-half the cases a mixture of spirituous and malt liquors—whisky with beer; in about one-sixth of the cases inebriates become intoxicated on beer alone. This last part of the statistics shows that beer is not a safe form of indulgence in liquor, though it is usually considered to be so. Dr. Dana has met with no wine inebriates. The people who drink wine in considerable quantities come from countries where intoxication is practically unknown and they very seldom drink even the stronger wines to excess. An exception must be made, however, in the matter of champagne. There are champagne inebriates. The maximum amount of liquor that a man can take and survive would seem to be about 3,000 gallons of whisky. With this amount the inebriate's climacteric is reached.

Legal Regulation of Inebriates.—In this State there are no effective laws that enable one to deal in a satisfactory way with inebriates. There is no doubt that habitual drunkards need restraint to enable them to keep away from liquor until their physical condition is improved enough to make it possible for them to resist their morbid cravings. The important question that must be considered is how can this legislation which is greatly needed be obtained without any infringement of the rights of the individual.

Pathology of Moderate Drinking.—Dr. Hermann Biggs said it was a very difficult thing to define moderate drinking. Individual tolerance for alcohol varies within very wide limits. Every one who has had hospital experience in New York, knows that a great change has come over the character of the patients suffering from alcoholism who are admitted to the city hospitals.

Twenty years ago, it was a very common thing to see cirrhosis of the liver. Cirrhotic changes of other kinds were not uncommon. Practically all the drunkards at that time became intoxicated by large quantities of spirituous liquors. Ten to fifteen, sometimes twenty, glasses of strong liquor were taken in the day. In the last fifteen years particularly, this has been changed. It is now the exception to find a history of the exclusive drinking of strong liquor. Not cirrhosis, but certain degenerative effects of the alcohol are now seen. Patients now say that while they take from three to five glasses of whisky in the day, they also drink from three to five pints of beer. Nearly always both forms of liquor are taken, though occasionally patients have taken only malt liquors.

Modification of Symptoms.—As the result of the changes in the habits of patients, the symptoms that come under observation have also changed. As the result of fatty degeneration, the symptoms usually seen come from the heart or the blood vessels.

The kidneys are much oftener affected than used to be the case. The records of the Department of Health form an interesting commentary on the change that has come over the habits of patients with regard to alcohol and the difference in pathological results. With regard to alcoholism, cirrhosis of the liver and hepatitis, only a small increase in the number of deaths have been reported during the last seven years. Needless to say there has been in the meantime a large increase in the population of the city. Not only this but better methods of diagnosis have made liver diseases better known to physicians. There are only three forms of disease in which there was an increase in the death rate in the city in the last twenty years. These three types of disease are the various forms of heart disease, kidney disease and malignant disease. While other forms of disease have decreased not alone in their general average, but also in absolute number these types of disease have increased very markedly. From myocarditis for instance, there are 150 per cent. more deaths than used to occur twenty years ago, although the population of the city has increased only from fifty to sixty per cent. The deaths from kidney disease have almost doubled during this period. Hospital experience is especially striking in this matter. The same phenomenon has been noticed in Berlin. It forms an interesting complement to the observations here in New York.

Alcohol and Nervous Diseases.—Dr. M. Allen Starr said that the subject of nervous diseases and alcoholism is a very large one and only one feature of it seems worthy of discussion just now. In writing about alcoholism not enough stress is laid on the varying effects of the different forms of intoxicating liquor that are used. A great deal is said about the effect of alcohol, but not enough distinction is made as to the wines and beer and the spirituous liquors. It is well known how differently wines of various kinds act on individuals. Sherry, for instance, is distinctly irritating to the temper and is apt to make the guests at a dinner party of a quarrelsome disposition. Port is much more soothing in its effect, it is more agreeable too at dinner parties, causes less discussion and controversy. Champagne is exhilarating. It has a stimulating influence on the flow of thought, it loosens the tongue, it is good for dinners where there is to be after-dinner speaking. Burgundy makes people think more slowly. It does not add to the conviviality of a festive occasion, things are apt to drag towards the end of the dinner where much Burgundy has been taken. Whisky, brandy and gin act very differently on different individuals. One should not speak then of the effects of alcohol, but of the different combinations of alcohol. The special kind of tipple to which a man is most addicted must be taken into account in considering what effect drinking has on his nervous system. It is important therefore always to ask a patient of what special form of spirituous liquor he takes most.

Action on Spinal Cord.—This action of alcoholic liquor on the spinal cord is very different from that produced on the brain. So far as is known no specific alcoholic disease of the cord is produced either pathologically or experimentally. We know alcoholic neuritis very well. Alcoholic brain lesions have been studied, but no specific alcoholic conditions of the cord. It affects both ends of the nervous system, central and peripheral, but not the intermediate conductor tracts. Alcohol affects the most highly organized nerve centers and sets up in them a process of dissolution. It acts just the reverse of evolution on the nervous system—attacking the most highly developed parts first. The lower centers of the brain and cord are not affected until later.

Pathological Studies.—Berkeley of Johns Hopkins has made an excellent set of studies of the pathological processes that are set up in the central nervous system. A characteristic lesion seems to be the destruction of the finer gemmules which exist on the terminal branches of the larger dendrites of the cerebral neurons. Berkeley's preparations show distinctly that alcohol breaks up these dendritic terminal fibers. As the result of the loss of these, cellular coordination is rendered incomplete and so there is a loss of memory and a loss of the connection of ideas. These two symptoms are characteristic of advanced stages of alcoholism clinically and the basis for the symptom is now clear.

Treatment.—It is well agreed now that the best treatment for acute alcoholism is the employment of hypodermics of strychnine and atropine. Delirium tremens is really a state

of starvation. The best treatment is to feed the individual. In the meantime his natural forces must be kept up by the use of the strong stimulants mentioned. The treatment of the chronic alcoholic or dipsomaniac is a extremely difficult question. It is probable that there is no complete recovery from periodical inebriety of a marked type with entire intermissions in which absolutely no liquor is taken. The basis of the disease is probably a moral obliquity rather than insanity. To make the diagnosis of insanity on a single symptom is always rash.

Legal Regulation.—Revision of the laws is needed that will enable one to control individuals who are given to inebriety. Once the alcoholic habit is formed, restraint is needed so that the patients can not get alcohol until their physical condition has been improved sufficiently to enable them to resist with more show of success. Under the influence of restraint there seems no doubt that one could increase the interval during which there is no drinking and so put off the evil day of the inebriate period and save suffering.

Moral suasion is of more influence than medicine. There is no doubt that neurasthenia is the basis of the alcoholic habit and that hereditary elements enter into it. With better health there is better resistance. The influence of the human will, however, is the best therapeutic agent that can be employed. There is no institution in this country to which a patient can go where alcohol may not easily be obtained. Dr. Starr makes this assertion deliberately. There should be an institution surrounded by the same restraints as for the commitment of the insane, in which an inebriate could be confined for from six months to a year, and in which no alcohol could possibly be obtained.

One may hope thus to save a certain number of inebriates and an effort in this direction is well worth the while.

Statistics Untrustworthy.—Dr. Alexander Lambert said that in the making of statistics it is not well to credit the statements of inebriates. The types of alcoholism that are interesting at Bellevue are, first, the ordinary drinker who goes on an acute drunk on Saturday night or Christmas or Fourth of July. Second, the periodic inebriate. Third, the acute alcoholic suffering from *mania a potu* which is quite different from delirium tremens. It is more manical and more furious, but there is less of terror in it. Patients get up and argue with their delusions, but without the horrors characteristic of ordinary delirium tremens and then there is rapid recovery.

Delirium tremens often develops after the alcohol is stopped suddenly. Patients sometimes come in and say that it is the water they have been drinking since giving up liquor which causes their delirium tremens. This is also the reason why delirium tremens develops so frequently after accidents. Patients confined to the hospitals are unable to obtain whisky in the amounts they are accustomed to and so the nervous explosion of the delirium tremens occurs. More than one-half the cases that come to the alcoholic wards of Bellevue are sent from the fracture wards. The relation of abstinence from liquor to their acute alcoholic condition is evident.

Moral Suasion.—At Bellevue when chronic alcoholics are sober enough to go out they are allowed to leave the hospital. When they are drunk enough to be sent to the hospital once more they are readmitted. Very little serious effort at reformation is made. Last year Dr. Lambert attempted to find out what the threat of the workhouse would accomplish as a restraint against relapses into alcoholism. For six weeks, from the middle of June, to the middle of August every patient known to be a chronic alcoholic was threatened with the workhouse if he should return. During these six weeks 481 cases were admitted to the hospital, 60 of them being repeaters. During the six weeks following only 320 were admitted, twelve of whom were repeaters. During the first six weeks there were admitted into the female alcoholic ward 161 patients. Here no threats were made and the following six weeks there were 181 patients, so that the time of the year had nothing to do with the decrease of admissions in the male ward. As soon as it was learned that the workhouse threat would not be carried out the number of admissions ran up again.

Difficulty of Cure.—Cure is almost hopeless in these cases. Nearly all of the chronic alcoholics who come to Bellevue have gone through inebriate asylums and institutions that claim to have methods of curing inebriety. Patients can not be convinced themselves that they will get over their habit, hence there is no permanent improvement. There is no doubt that there should be some legal regulation by which patients can be held in physical durance until their brain regains its vigor and their nervous system is toned up so as to help them resist temptation. Without some such means as this all ordinary therapeutic methods physical and moral are almost sure to fail.

Heredity.—It is hard to say how much heredity has to do with the inebriety. Alcoholic patients are not consciously untruthful, but they practically never tell the truth. They do not lie, but they have lost their moral sense with regard to the statement of facts. There is no doubt that alcoholism in the parents produces neurotic tendencies in the children. They do not directly inherit their inebriety, but a lack of resistance to external influences. The prognosis of a case of inebriety is hopeless unless there is some possibility of restraint.

Pathological Lesions in Nerve Cells.—Dr. James Ewing said that many changes occur in the nervous system as the result of alcohol-

ism, but the specific lesion of alcohol may be said to consist in changes in the ganglion cells. There are two forms of alcoholism, the acute and the chronic. After delirium tremens there is a specific condition of the brain visible even to the naked eye. This consists of venous congestion often to an extreme degree with marked edema. Where this condition has prevailed for some time, the nerve cells show characteristic changes. With the Nissl staining method these changes can be seen very clearly. They consist of a most violent disturbance of the economy of the cell, such as is found only in sunstroke, tetanus, and hydrophobia. As a matter of fact it is impossible to differentiate the cells of the brain which have been affected by these four fulminant conditions.

By the Nissl staining method each cell is seen to contain in health a considerable amount of chromatic substance. This is generally conceded now to contain the reserve nutriment for the cell. After death from acute alcoholism the chromophilic bodies are found to be consumed. In some cases no trace of them at all is left, in others only slight traces are found. The distribution of the lesion of the cells shows the general effect of the alcohol on the nervous system. Its influence is not limited to any one locality, but affects every part of the brain. In the motor cortex which presides over the control of the muscles, in the frontal lobe which contain the psychic centers and in other parts of the cortex there is extreme destruction of the chromatic bodies. The cells of the spinal cord do not show these degenerative changes. This confirms the observation made clinically and advanced by Dr. Starr this evening that there is no organic disease of the cord referable to alcoholism. Animals can not be successfully brought to a condition of alcoholism which will reproduce the changes that occur in human beings. This confirms the conclusion that alcohol affects only the higher centers.

General Pathology.—Alcohol is a more frequent etiological factor in the production of visceral pathological lesions than is tuberculosis or syphilis. The whole of general pathology is stamped with the effects of chronic alcoholism. The brain cells are very characteristically affected, but every cell in the body suffers from the effects of the alcoholisms.

Legal Regulation.—Dr. Joseph Collins said that the most important thing needed for the cure of alcoholism is prolonged abstinence from alcoholic liquor, which puts the nervous systems of inebriates in a condition to help them resist the constitutional craving for spirits. There must be a law to restrain alcoholics. A number of countries have such laws. The experience of New Zealand, of certain of the provinces of Australia and of Switzerland show that such laws are practicable. South Australia particularly has an effective set of legal regulations for inebriety—every one who is convicted of being drunk three times within six months being liable to commitment to an inebriate asylum. Switzerland is the only country in Europe that has such a regulation, but her experience is encouraging. As the result of the recommendations of recent Congresses France will soon have laws and institutions for inebriates.

United States Laws.—In the United States laws in this matter have been desultory and spasmodic. In New York for instance there is an inebriates' home to which alcoholics can be committed and which receives 12½ per cent. of the money obtained from licenses, yet its power for good is dying out. There is at Inwood St. Saviour's Home conducted by the Episcopal Sisters to which women may be committed who are addicted to the alcoholic or any of the drug habits. In other States there are corresponding institutions, but somehow their efficacy is not what it could and should be.

Alcohol and Tuberculosis.—Dr. Knopf said that alcohol is one of the greatest etiological factors in the development of tuberculosis. Twenty-five per cent. of the scrofulous children are born of tuberculous parents. Alcohol is also frequently phthisiogenetic in the adult. Doctors frequently mislead patients by recommending the use of alcohol freely and making them think that it is a specific for their disease. Not infrequently Dr. Knopf has been told by patients that they thought it the best thing for them. Alcohol is undoubtedly useful in phthisis, but it may easily disturb the nutrition and if used for its antipyretic influence will usually make the patients alcoholic habitues. If there were better tenement houses, if men could go home to agreeable living apartments, if their wives were good cooks, there would be less alcoholism and much less tuberculosis. Without an intelligent wife and a cheerful home alcoholism will surely increase.

Harmfulness of Moderate Drinking.—Dr. George Peabody said that it is wonderful what an amount of ignorance exists with regard to the effect of alcohol on the system. This is true even for the well informed. How often does not the doctor hear it said that a patient has surely not injured himself by taking alcohol because he has never gotten drunk. Drunkenness is only a social incident. Alcohol may work its worst harm on the system without producing drunkenness. It must be remembered that the distilling and the brewing companies represent enormous investments the main purpose of which is to keep up the sale of intoxicating liquor. These immense financial interests are practically banded together to debauch the community. These make legislation difficult. Besides these there are other favoring factors sometimes unthought of. Many of the so-called chronic remedies and certain of the stimulant

bitters, are really only diluted alcohol. Some years ago the Massachusetts Board of Health analyzed twenty to thirty samples of bitters that were advertised as containing no alcohol. Some of them contained as high as 40 per cent. of alcohol. This is, they were practically whisky. They were advertised as soothing inducements to temperance.

Wine-Bibbing.—When the patients say that they take wine it must not at once be concluded that they take a mild form of liquor. Sherry for instance is a popular drink, but it is not wine in any true sense of the word. To the natural wine is always added spirits in varying proportions, so that some kinds are as strong as whisky. Women will often take a glass of sherry who would not think of drinking whisky.

Dr. R. H. M. Sells said that "Vinegar Bitters," so much advertised as a temperance drink, contained almost as much alcohol as whisky. The sum of $1,200,000,000 was spent last year on alcohol; $6,000,000 on missionaries—Keeley himself died of alcoholism so that so-called cures are mainly "fakes."

THE MEDICAL ASSOCIATION OF THE GREATER CITY OF NEW YORK.

Stated Meeting, Held March 11, 1901.

The President, Robert F. Weir, M.D., in the Chair.

Diet in Treatment of Heart Affections.—Dr. Henry Illoway read a paper on this subject. He said that while all the treatises on cardiac diseases referred to the importance of such a regimen, the information given was of a general character, and the necessity of correct dietary rules was not appreciated. That the stomach has a marked influence upon the heart had long been recognized, angina pectoris and even cardiac dilatation have been known to result from gastric disturbance.

Details of three cases were given. The first was that of a woman of fifty-seven years suffering from dilatation, with frequent paroxysms, attended by a sense of agonizing fear. The trouble was primarily due to nervous shock. Her weight, originally 175 pounds, became reduced to 100, notwithstanding that she was a very hearty eater and indulged in all sorts of dietary excesses, even between her meals. She was treated by the best physicians, and finally her case was given up as hopeless. When first seen by Dr. Illoway she spent all her time between her bed and her lounge, with brief intervals in a rocking-chair. He explained to her that she was in no real danger, and encouraged her to move about and get the air. A strictly regulated diet was enforced, and she was treated with tonics (particularly nux vomica and arsenic), and with systematic massage. The paroxysms entirely disappeared, and she is now in excellent health.

The second case was that of a clerk suffering from aortic stenosis and mitral regurgitation, who was incapacitated for work. Diarrhea was a prominent symptom. All meats, all fruits, and all vegetables were withdrawn. The diet prescribed consisted of eggs, milk, crackers, and animal broths, in limited quantities, with a little old sherry at bedtime. Medical treatment was given *pro re nata*, and consisted principally of strophanthus and iron. Under this course he rapidly improved, so that he was enabled to resume his work.

The third case was that of a pharmacist of twenty-six years, with tricuspid regurgitation. He suffered greatly from pain in the chest, with shortness of breath, and had the appearance of a tuberculous person. He had, in fact, been treated for this disease, although there was no cough. He was advised to give up the cares of business, to go to the country, not to lift or carry, and to avoid stairs. The diet prescribed was almost the counterpart of that of the preceding case, and he improved very rapidly. After a time he felt so well that he concluded to return to the city. He opened a new store and was soon engrossed with the cares of a large business, while he indulged his appetite freely. The heart could not stand this strain, and he broke down again. The damage sustained was now irretrievable, and, while he improved for a time under treatment, he finally died with symptoms of cerebral congestion.

Gastro-Intestinal Affections and the Heart.—Dr. L. F. Bishop said that many cases of gastric and hepatic disturbance are of cardiac origin. He cited a case of myocarditis in which the patient, a young woman, was treated for malaria, gastro-enteritis, etc., without success. She was then sent to St. Luke's Hospital, where her stomach was washed out and she was given calomel, with anodynes to relieve her pain. She finally left in disgust. When she came under Dr. Bishop's care he put her to bed and treated her principally with digitalis and a little hydrochloric acid. The venous engorgement of the stomach and liver were promptly relieved when the heart's functions were restored, and she was soon going about in comparatively good health. As a rule affections of the stomach are secondary to those of the heart, rather than the reverse. Notwithstanding all that has been said on the subject of diet it is not possible to lay down fixed rules, and each individual instance must be considered by itself. A judiciously mixed diet, at rather frequent intervals, was generally the most satisfactory. He certainly saw a great many more cases of disease of the heart's muscle now than formerly. There is great risk from any overloading of the stomach or attacks of indigestion, and therefore indiscretions in diet are particularly dangerous for those suffering from cardiac disease.

Diet Not More Paramount in Cardiac Than

in Other Diseases.—Dr. F. W. Jackson disagreed with Dr. Illoway's conclusions, and thought that mistakes in diet were made as well as in medication. In some instances hygiene and diet are of the greatest possible importance, while in others they are of no consequence. Of course, if certain forms of food give rise to disturbance, it is essential to regulate the diet.

Definite Dietary Rules of Great Advantage.—Dr. Alexander Lambert thought the profession owed a debt of gratitude to Dr. Illoway for giving definite rules, as the books were certainly altogether too vague on this subject. People usually eat too much. Eventually the arteries or the myocardium tell the story, and it becomes necessary to seek medical advice. It is very difficult, however, to fight against the habits of a life-time. Especially is this true for the gouty subjects. In case of angina pectoris the patient should take his meals dry, and four hours should be allowed for digestion, with an additional hour for the stomach to rest. At the end of four hours after a meal water or tea may be taken, and the liquid should be hot rather than cold. Food between meals should be absolutely prohibited. The principal meal should always be in the middle of the day. More than five ounces of fluid should never be taken at any one time. Alcohol is not required, but if it is insisted upon, one-half ounce of whiskey in the twenty-four hours is ample. The cutting off of all tobacco is absolutely essential.

Diet First in Importance.—Dr. W. H. Porter said he did not think diet should be divorced from medication. With the present knowledge the subject of dietetics is not as difficult or intricate as it formerly was. The system requires about equal proportions of starch, proteid matter, and fat, and the problem is how to get the proper amount of each appropriated with the least taxation. There should therefore be a well-regulated mixed diet, but one in which animal food predominates. The following list is suggested. Two eggs, seven ounces of wheat bread, with butter, and from half a pound to a pound of meat. The stomach is not the only organ of digestion. As a matter of fact only one-ninth part of the digestion is performed in this organ, while the other eight-ninths belong to the intestines. A careful watch of the urine will always tell how the patient is doing. If the amount of urea is low and of the uric acid large, the condition is unsatisfactory, while the presence of indican indicates indigestion. Dr. Porter had never found it necessary to put this class of patients on an absolutely liquid diet.

Anesthetization as a Specialty.—The second paper of the evening was by Dr. S. Ormond Goldan. It was to be remembered that as the result of an operation the patient was liable to suffer not only from surgical shock, but also from anesthetic shock. Hence it was often of vital importance that the latter should be minimized to the greatest possible degree. In order to accomplish this the anesthetic given should be selected with the greatest care and administered with the highest skill, and this could best be done by one who had devoted special attention to the subject. Safety was of the first importance, and it was a well-known fact that fatalities had sometimes resulted from operations of the most trifling character. The specialist was always prepared for any emergency that might occur. In order that anesthesia could be secured with the greatest success, as well as safety, it was desirable that a careful examination should be made of the patient a considerable time preceding the operation and again immediately before the latter.

MEDICAL SOCIETY OF RUSH COLLEGE.

Stated Meeting, Held March 4, 1901.

Acute Ulcerative Endocarditis.—Dr. Theodore Tieken demonstrated this specimen showing a large perforation in the posterior segment of the aortic valve, and almost complete destruction of the anterior cusp by the ulcerative process. The valves were covered with large vegetations, many of which were calcified. The mitral valves were likewise studded with vegetations, which extended down the chordæ tendinæ as far as the apex of the papillary muscles. In addition to the ulcerative process on the aortic valves, an area of ulceration was found at the attachments of the bases of the semilunar valves, which extended through the walls of the aorta, into the peri-aortic space. The heart was greatly hypertrophied and showed some interstitial fibroid changes. In the same case were found an annular pancreas and a sacculation of the duodenum, caused by the constriction of the intestinal lumen by a band of glandular substances, springing from the head of the pancreas in such a manner as to entirely encircle the lower part of the duodenum (descending portion) forming a true "pancreas annulare." The pancreas was normal in size and consistency, and cut with about normal resistance. The head measured 4 cm. in its vertical and 3½ cm. in its transverse diameter. The annular portion measured 2¾ cm. at its narrowest portion and was 1 cm. in thickness. The ducts were in every way normal, and no abnormality was noticed in its vascular supply. In a hurried review of the literature he was able to find only four other cases reported to date. Although the patient had been under observation for nearly a year, no symptoms referring to the gastro-intestinal tract were ever manifested during life.

Obstruction of Popliteal Artery.—Dr. James B. Herrick presented a specimen showing obstruction at the bifurcation of the pop-

liteal artery produced by an embolus from the heart, the seat of chronic valvular and myocardial disease. He also showed a specimen of a suprarenal tumor where the tumor mass had invaded the inferior vena cava. This finding, which had been suspected during life, explained the early occurrence of an edema of the lower extremities and had been one determining factor in deciding against operation for the removal of the kidney.

Lymphatic Leucemia.—Dr. Herrick also showed specimens of blood from six cases of lymphatic leucemia. He referred to the unknown etiology of the disease, to its clinical separation into acute and chronic varieties, to the resemblance of the former to an acute infection and of the latter to Hodgkin's disease, and also dwelt upon the variations in the blood picture as shown in his six cases. The statement so frequently made that in lymphatic leucemia nucleated red corpuscles are very rare, was disproven in four of the six cases, three acute and one chronic, and specimens were exhibited showing numerous nucleated red blood corpuscles. He spoke also of the great variety in the picture presented by the blood according as the larger or smaller mononuclear forms prevailed in a given case. In one case, a rapidly acute one, there had been about two per cent. of myelocytes. Another interesting combination he had seen was that of a patient with carcinoma of the neck and jaw with diffuse hyperplastic enlargement of the lymph glands and with the typical findings of a lymphatic leucemia, the blood counts never showing less than 100,000 leucocytes.

Aneurismal Extension.—Dr. L. Hektoen presented several specimens illustrating interparietal and intraparietal extension into the heart of aneurism of the beginning of the aorta, and of dissecting aneurism of the heart. He described the spatium periaorticum cordis of Vestberg. The spatium periaorticum cordis is situated at the root of the aorta and is covered by the reflection of the epicardium as it passes over the aorta behind the auricles and forms the floor of the sinus transversus pericardii. It is in this space that interparietal dissecting aneurisms of the heart most frequently are found by rupture or ulceration of its internal wall, the aorta. The specimens demonstrated illustrated the formation of dissecting aneurism in this space as a consequence of ulcerative endocarditis of the aortic valves, and in consequence of the rupture into the space of small aneurisms in the beginning of the aorta developing primarily upon the basis of a syphilitic aortitis. He also demonstrated a specimen of a large interparietal aneurism in the right ventricle originating in the sinus Valsalva of the aorta, and also an aneurism originating in the left ventricle by two small openings and forming a large cavity upon the lateral and posterior aspects of the left ventricle. The postmortem in this case was made by Dr. LeCount and the question as to the dissecting character of this aneurism was discussed, the conclusion reached being that the aneurism most likely originated in a suppurative process in the myocardium and probably reached its present large extent in consequence of more or less dissection of the walls of the left ventricle.

Portal Obstruction.—D. H. G. Wells reported two cases illustrating the relief of portal obstruction in hepatic cirrhosis by plastic peritonitis. In one the condition was found at autopsy, there having been no evidence of obstruction during life; the numerous adhesions of a chronic fibrous peritonitis were found largely replaced by thin-walled vessels, full of venous blood, up to the size of a crow's quill. The portal obstruction was due to an obstructive biliary cirrhosis from impaction of a calculus in the common bile-duct. The other case was that of a man with excessive ascites of about twenty months' duration, requiring frequent tapping, and due to alcoholic atrophic cirrhosis. A large umbilical hernia, resulting from the ascites, became strangulated and was reduced by operation. No attempt was made to establish a plastic peritonitis and there was but little intra-abdominal manipulation, yet the ascites never recurred up to the time of the patient's death, eleven months later, from carcinoma of the pharynx.

CHICAGO PATHOLOGICAL SOCIETY.

Stated Meeting, Held March 11, 1901.

President, L. Hektoen, M.D., in the Chair.

Primitive Splenomegaly.—Dr. Maximilian Herzog read this paper, based upon a study of the literature of the subject and on two cases in which Dr. M. L. Harris had performed splenectomy (See MEDICAL NEWS, p. 471).

In the discussion Dr. W. A. Evans referred to a patient of Dr. Ferguson in whom there occurred petechial spots in the skin and the spleen became smaller before death. He spoke of a case reported by Dr. Dalton before the London Clinical Society, which was clinically one of splenic anemia, but at autopsy the enlargement of the spleen was discovered to depend upon passive congestion, due to constriction by an anomalous colon.

Dr. Leo Loeb declined to accept the theory of an enzyme which destroys the red blood-cells in the spleen. Dr. E. H. Ochsner referred to a case which clinically was splenic anemia, and which improved for a time after the spleen was removed, but subsequently died. A few small peritracheal glands, which were tuberculous, were found at autopsy. A possible infection in such cases must always be considered. Dr. B. W. Sippy spoke of the similarity of these cases to the ordinary lymphatic pseudoleucemia as regards blood

changes, general asthenia, etc., a similar enlargement of the syleen also being observed. In many cases of splenic anemia there is enlargement of the lymph glands, although it may be slight. In all cases the bone marrow has been converted into a fetal condition, like that found in many cases of pseudoleucemia lymphatica. He objected to the term splenic anemia, and considers the one splenic pseudoleucemia to be the proper one. He believes the primary cause cannot be positively located in the enlargement of the spleen. In the case described by himself, the fibrous changes were much more marked than in Dr. Herzog's. This he thinks may depend upon the longer duration of the disease.

Dr. Herzog in closing said that he did not claim that there was proliferation of the endothelium alone, but that the increase in the endothelium was enormous, so much so that the condition had been mistaken for an endothelioma. Dalton's case had not been considered as it was too indefinite. One reason for separating these cases from lymphatic pseudoleucemia is because they are curable by operation.

Dr. Theo. Tieken exhibited a specimen of pancreas annulare, with resulting constriction of the duodenum so that a large fusiform sacculation of the latter had formed.

Dr. H. M. Ricketts presented specimens of experimental general blastomycosis in the dog produced by the intravenous inoculation of an organism obtained from a case of blastomycosis of the human skin.

BOOK REVIEWS.

Introduction to the Study of Medicine. By G. H. Roger, M.D. Authorized Translation by M. S. Gabriel, M.D. D. Appleton & Co., New York.

This book is intended to give medical students at the beginning of their study not only some elementary technical knowledge of disease, but also some conception of what disease is, how it originates, what the reaction of the organism is, and how a physician studies, places, and treats any particular disease.

The style is rather diffuse, especially so for a book which in five hundred and thirty-six pages aims to give a superficial familiarity with all medicine. Some chapters go into minutiæ which can hardly be of service to those for whom the book is intended. For example, there is a long account of the classification, the names, and the cultural characteristics of moulds and bacteria, which is, however, not full enough for practical use. Certain chapters giving a detailed description of the effects of some external causes of disease, such as cold, heat, and electricity, may be found entertaining and instructive for the experienced graduate.

Prof. Roger tends to depreciate the practical use of the clinical laboratory and to assert the sufficiency of simple bedside observation.

Diseases of the Anus and Rectum. By D. H. Goodsall, F.R.C.S., and W. Ernest Miles, F. R. C. S. Part I. Longmans, Green & Co., London and New York, 1900.

This is the first of two volumes on this subject and contains a very good resumé of English opinion with regard to the diseases of the lower end of the digestive tract. The question of ano-rectal fistula is treated with special completeness. The illustrations of this subject are numerous, but many of them fail to convey any additional information to what is contained in the text. The reproduction of photographs of the anal region is not apt to prove good material for illuminative illustration. The authors are reasonably conservative with regard to operations for fistulæ, yet we think the modern trend of thought with regard to the opening of tuberculous abscesses is sufficient to justify even greater conservatism than the authors might think proper. Most ischio-rectal collections of pus are what may be called cold abscesses and these we have learned Nature can take care of as a rule almost better than the surgeon. The chapter on hemorrhoids is the longest in the book and the methods of physical examination and the possible medical treatment of the condition are well written up.

Physiological Optics, Dioptics of the Eye, Functions of the Retina, Ocular Movements and Binocular Vision. By Dr. M. Tscherning, Adjunct-Director of the Laboratory of Ophthalmology at the Sorbonne, Paris. Authorized Translation by Carl Weiland, M.D. The Keystone, Philadelphia.

An essential feature of a complete work of this kind is the opening chapter on *optic principles;* but the interest and helpfulness of the book are not found here. It is to be found in the subsequent chapters, especially those dealing with anomalies of refraction, spherical aberration, entopic phenomena, accommodation, color sense, and ocular movements. Especially valuable is the chapter on accommodation in which a new putting of things and new ilustrations make the subject matter very helpful to the understanding. Indeed, there is none of the book superfluous. There is special need for it, because ordinary treatises cannot in the nature of things go into full consideration of each of these subjects. Here they receive a scientific and full treatment up to date which makes the book an authority for students and specialists. None could more suitably give us the translation of this valuable work than could the distinguished gentleman whose own name is associated with much work of the same character.